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<b>(54) Title:</b> SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION PRODUCT  <b>(57) Abstract</b>  Partial and complete human cDNA and genomic sequences corresponding to particular expressed sequence tags (ESTs). The ESTs are cDNA sequences that are generally between 150 and 500 base pairs in length, are derived from human brain cDNA libraries, correspond to genes transcribed in human brain, and have base sequences identified herein as SEQ ID NOS: 1-2421.		

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**SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION  
PRODUCT**

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**Technical Field**

The present invention relates to newly identified polynucleotide sequences corresponding to transcription products of human genes, and to complete gene sequences associated therewith.

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**Background**

This invention relates to human genes. Identification and sequencing of human genes is a major goal of modern scientific research. The sequence of human genes is more than just a scientific curiosity. For example, by identifying genes and determining their sequences, scientists have been able to make large quantities of valuable human "gene products." These include human insulin, interferon, Factor VIII, tumor necrosis factor, human growth hormone, tissue plasminogen activator, and numerous other compounds. Additionally, knowledge of gene sequences can provide the key to treatment or cure of genetic diseases (such as muscular dystrophy and cystic fibrosis). The present invention represents a quantum leap forward in mankind's knowledge of human gene sequences.

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There are several basic concepts of molecular biology which figure prominently in the invention. A brief explanation of those concepts follows. Additional background information and definitions for scientific terms can be found

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in the literature. See, for example, "Glossary of Genetics, Classical and Molecular" by R. Rieger, A. Michaelis, and M.M. Green (Fifth Edition, Springer-Verlag, New York (1991)). The contents of this and other publications cited in the specification are incorporated by reference herein.

At an initial level, the present invention is based on identification and characterization of gene segments. Genes are the basic units of inheritance. Each gene is a string of connected bases called nucleotides. Most genes are formed of deoxyribonucleic acid, DNA. (Some viruses contain genes of ribonucleic acid, RNA.) The genetic information resides in the particular sequence in which the bases are arranged. A short sequence of nucleotides is often called a polynucleotide or an oligonucleotide.

Like genes, polypeptides are built from long strings of individual units. These units are amino acids. The nucleotide sequence of a gene tells the cell the sequence in which to arrange the amino acids to make the polypeptide encoded by that gene. In general, chains of up to about 200 amino acids are called polypeptides, while proteins are larger molecules made up of polypeptide subunits; both types of molecules are referred to generally herein as polypeptides. A triplet of nucleotides (codon) in DNA codes for each amino acid or signals the beginning or end of the message (anticodon). The term codon is also used for the corresponding (and complementary) sequences of three nucleotides in the mRNA into which the original DNA sequence is transcribed.

Generally, enzymes in the cell transcribe the permanent DNA of the gene into a temporary RNA copy, called messenger RNA or mRNA. The mRNA, in turn, can be translated into a polypeptide by the cell. This entire process is called gene expression, and the polypeptide is the gene product encoded by the gene.

Scientists have previously discovered how to reverse the transcription process and copy mRNA back into DNA using an



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enzyme called reverse transcriptase. The resulting is called complementary DNA, or cDNA. This is schematically shown in the single Figure. When substantially all of the mRNA from one cell or tissue is converted to cDNA at once and cloned into multiple copies of a recombinant vector to allow replication and manipulation in the laboratory, the result is called a cDNA library.

The various types of genes include those which code for polypeptides, those which are transcribed into RNA but are not translated into polypeptides, and those whose functional significance does not demand that they be transcribed at all. Most genes are found on large molecules of DNA located in chromosomes. Double stranded cDNA carries all the information of a gene. Each base of the first strand is joined to a complementary base (hybridized) in the second strand. The linear DNA molecules in chromosomes have thousands of genes distributed along their length. Chromosomes include both coding regions (coding for polypeptides) and noncoding regions; the coding regions represent only about three percent of the total chromosome sequence.

An individual gene has regulatory regions that include a promoter which directs expression of the gene, a coding region which can code for a polypeptide, and a termination signal. The regulatory DNA sequence is usually a noncoding region that determines if, where, when, and at what level a particular gene is expressed.

The coding regions of many genes are discontinuous, with coding sequences (exons) alternating with noncoding regions (introns). The final mRNA copy of the gene does not include these introns (which can be much longer than the coding region itself), although it does contain certain untranslated regions that usually do not code for the polynucleotide gene product. Untranslated sequences at the beginning and end of the mRNA are known as 5'- and 3'-untranslated regions,

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respectively. This nomenclature reflects the orientation of the nucleotide constituents of the mRNA.

5 A cDNA is a DNA copy of a messenger RNA, which contains all of the exons of a gene. The cDNA can be thought of as having three parts: an untranslated 5' leader, an uninterrupted polypeptide-coding sequence, and a 3' untranslated region. The untranslated leader and trailing sequences are important for initiation of translation, mRNA stability, and other functions. The untranslated leader and trailing sequences are called 5'- and 3'-untranslated sequences, respectively. The 3' untranslated sequence is usually longer than the 5' untranslated leader, and can be longer than the polypeptide-coding sequence. The untranslated regions typically have many, randomly-distributed stop codons, and do not display the nonrandom base arrangements found in coding sequences. The 5'-untranslated sequence is relatively short, generally between 20 and 200 bases. The 3'-untranslated sequence is often many times longer, up to several thousand bases.

20 The translated or coding sequence begins with a translational start codon (AUG or GUG) and ends with a translational stop codon (UAA, UGA, or UAG). Generally, translation begins at the first "start" codon on the mRNA and proceeds to the first "stop" codon. Coding sequences can be distinguished by their nonrandom distribution of bases; numerous computer algorithms have been developed to distinguish coding from noncoding regions in this way.

30 Human DNA differs from person to person. No two persons (except perhaps identical twins) have identical DNA. While the differences, called allelic variations or polymorphisms, are slight on a molecular level, they account for most of the physical and other observable differences between individuals. It has been estimated that approximately 14 million sequence polymorphism differences exist between individuals.

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5 The ability of one strand of DNA to attach or hybridize  
to a complementary strand has already been exploited for  
several purposes. For example, small pieces of DNA (15 to 25  
base pairs long) can be made which will hybridize to longer  
strands of DNA which have a complementary sequence. These  
short "primers" can be selected such that they hybridize to  
a specific, unique location on the longer strand. Once the  
primers have hybridized to their target on the DNA, the  
polymerase chain reaction (PCR) can be employed to generate  
10 millions of copies of (or amplify) the particular segment of  
DNA between the locations to which two primers are bound.  
Briefly, this technique allows amplification of a DNA region  
situated between two convergent primers, using  
oligonucleotide primers that hybridize to opposite strands.  
15 Primer extension proceeds inward across the region between  
the two primers, and the product of DNA synthesis of one  
primer serves as a template for the other primer. Repeated  
cycles of DNA denaturation, annealing of primers, and  
extension result in an exponential increase in the number of  
20 copies of the region bounded by the primers.

Similarly, a labeled segment of single-stranded DNA can  
be hybridized to a longer DNA sequence, such as a chromosome,  
to mark a specific location on the longer sequence. Segments  
of DNA 50 bases long or longer that hybridize to a unique DNA  
25 location in the human genome are extremely unlikely to  
hybridize elsewhere in the human genome.

The Human Genome Project is an effort to sequence all  
human DNA (the human genome). The human genome is estimated  
to comprise 50,000 - 100,000 genes, up to 30,000 of which  
30 might be expressed in the brain (Sutcliffe, *Ann. Rev.*  
*Neurosci.* 11:157 (1988)). Once dedicated human chromosome  
sequencing begins in three to five years, it was expected  
that 12-15 years will be required to complete the sequence of  
the genome (Report of the Ad Hoc Program Advisory Committee  
on Complex Genomes, Reston, Va., Feb. 1988, D. Baltimore Ed.  
35 (NIH, Bethesda, Md, 1988)). At that rate, the majority of

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human genes would remain unknown for at least the next decade. The present invention can greatly accelerate the pace at which human genes can be identified and mapped. Most gene researchers, in conjunction with publication of their results in this field, submit sequence data to the GenBank database. Prior to the present invention, GenBank listed the sequences of only a few thousand human genes and less than two hundred human brain mRNAs (GenBank Release 66.0, December, 1990).

The role of sequencing complementary DNA (cDNA), reverse transcribed from mRNA, as a part of the human genome project has been vigorously debated since the idea of determining the complete nucleotide sequence of humans first surfaced. The coding sequence of all human genes represents most of the information content of the genome, but only 3-5% of the total DNA. In contrast, cDNA (which is only made from the transcription product of active genes) is one-half to three-fourths (the remainder being 5'- and 3'-untranslated sequence) meaningful genetic information. Thus, some have argued that cDNA sequencing should take precedence over genomic sequencing (Brenner, CIBA Found. Symp. 149:6 (1990)). However, until now, such arguments have not been heeded.

Genomic sequencing proponents have argued the difficulty of finding every mRNA expressed in all tissues, cell types, and developmental states, and that much valuable information from intronic and intergenic regions, including control and regulatory sequences, will be missed by cDNA sequencing. (Report of the Committee on Mapping and Sequencing the Human Genome, National Research Council (National Academy Press, Washington, D.C. 1988)). Further, sequencing of transcribed regions of the genome using cDNA libraries has heretofore been considered impractical or unsatisfactory. Libraries of cDNA were believed to be dominated by repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes comprising common or housekeeping sequences. It was believed that cDNA libraries would provide few sequences

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corresponding to structural and regulatory polypeptides or peptides. See, for example, Putney, et al., *Nature* 302:718-721 (1983). Putney, et al. sequenced over 150 clones from a rabbit muscle cDNA library and identified clones for 13 of the 19 known muscle polypeptides, including one new isotype but no unknown coding sequences.

Another perceived drawback of cDNA sequencing was that some mRNAs are abundant, and some are rare. The cellular quantities of mRNA from various genes can vary by several orders of magnitude. This led critics to believe that most information obtained from cDNA sequencing would be repetitious and useless.

The present invention demonstrates that, despite such skepticism, cDNA sequencing now provides a rapid method for obtaining enormous amounts of valuable genetic information and DNA products of great utility for the biotechnology and pharmaceutical industries. Not only can many distinct cDNAs be isolated and sequenced, even partial cDNAs can be used, with conventional, well-understood methods, to isolate entire genes, and to determine the chromosomal locations and biological functions of these genes. As is demonstrated here, fragments of only a few hundred bases are sufficient, in many cases, to identify the probable function of a new human gene if it is similar in structure to a gene from another animal, or from plants or bacteria. Similarly, even fragments of untranslated regions of a cDNA can be used to: i) isolate the coding sequence of the cDNA; ii) isolate the complete gene; iii) determine the position of the gene on a human chromosome, and hence the potential of the gene to cause a human genetic disease; and iv) determine the function of the gene by means of experiments in which the function of the native gene is disrupted by the addition of a short DNA fragment to the cell, e.g., using triple helix or antisense probes.

Because coding regions comprise such a small portion of the human genome, identification and mapping of transcribed

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regions and coding regions of chromosomes is of significant interest. There is a corresponding need for reagents for identifying and marking coding regions and transcribed regions of chromosomes. Furthermore, such human sequences are valuable for chromosome mapping, human identification, identification of tissue type and origin, forensic identification, and locating disease-associated genes (i.e., genes that are associated with an inherited human disease, whether through mutation, deletion, or faulty gene expression) on the chromosome.

#### SUMMARY OF THE INVENTION

Contrary to the expectations of the scientific community, cDNA screening and sequencing techniques have now been used to discover a large number of heretofore unknown human genes. Disclosed herein are over 2,400 new human polynucleotide sequences. These sequences could represent up to 5% of all human genes. The novelty of these sequences has been established through comparison to both nucleotide sequence databases and amino acid sequence databases. Surprisingly, over 80% of the sequences generated were unrelated to any sequences previously described in the literature.

The sequences of the present invention were ascertained using a fast approach to cDNA characterization. This approach could facilitate the tagging of most expressed human genes within a few years at a fraction of the cost of complete genomic sequencing, provide new genetic markers, provide new DNA-based therapeutics and diagnostics, and provide other valuable nucleotide reagents.

The sequences disclosed herein, styled Expressed Sequence Tags ("ESTs"), are markers for human genes actually transcribed *in vivo*. Techniques are disclosed for using these ESTs to obtain the full coding region of the corresponding gene. The use of ESTs, complete coding sequences, or fragments thereof for marking chromosomes, for

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mapping locations of expressed genes on chromosomes, for individual or forensic identification, for mapping locations of disease-associated genes, for identification of tissue type, and for preparation of antisense sequences, probes, and constructs is discussed in detail below. Unlike the random genomic DNA sequence tagged sites (STSS) (Olson et al., Science 245:1434 (1989)), ESTs point directly to expressed genes.

Various aspects of the present invention thus include the individual ESTs, corresponding partial and complete cDNA, genomic DNA, mRNA, antisense strands, triple helix probes, PCR primers, coding regions, and constructs. Also, where one skilled in the art is enabled by this specification to prepare expression vectors and polypeptide expression products, they are also within the scope of the present invention, along with antibodies, especially monoclonal antibodies, to such expression products.

#### BRIEF DESCRIPTION OF THE DRAWING

The single drawing Figure schematically illustrates the progression from chromosome to gene to mRNA to cDNA.

#### DETAILED DESCRIPTION OF THE INVENTION

The detailed description that follows provides not only the actual sequence of each new EST, but also explains how the ESTs were obtained, how to obtain the corresponding complete cDNA sequence and the corresponding genomic DNA sequence, how to make DNA constructs from the ESTs and corresponding sequences, how to use those sequences as reagents in molecular biology and other fields, how to produce gene products from the ESTs and corresponding sequences and antibodies to those gene products, and the functional categories of many ESTs and corresponding genes. Furthermore, numerous actual working examples and predictive

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examples are provided to demonstrate and exemplify numerous aspects of the invention.

#### I. ESTs from cDNA Libraries

5       The sequences of the present invention were isolated from commercially available and custom made cDNA libraries using a rapid screening and sequencing technique. In general, the method comprises applying conventional automated DNA sequencing technology to screening clones, advantageously  
10       randomly selected clones, from a cDNA library. Preferably, the library is initially "enriched" through removal of ribosomal sequences and other common sequences prior to clone selection. According to the present method, ESTs are generated from partial DNA sequencing of the selected clones.  
15       The ESTs of the present invention were generated using low redundancy of sequencing, typically a single sequencing reaction. While single sequencing reactions may have an accuracy as low as 97%, this nevertheless provides sufficient fidelity for identification of the sequence and design of PCR  
20       primers.

      Most human genes can be identified by EST sequencing from libraries of cDNA copies of messenger RNAs. However, some genes are expressed only at specific times during embryonic development, or only in small amounts in a few  
25       specific cell types. Other genes have mRNAs that are degraded very quickly by the cell in which they are expressed. If any of these are the case, transcripts of the gene will not be represented in cDNA libraries so the gene will not be identifiable by EST sequencing. A new method  
30       called "exon amplification", however, can be used to isolate and identify transcripts of such genes.

      Exon amplification works by artificially expressing part or all of a gene that is contained in a cloned fragment of genomic DNA such as a cosmid or yeast artificial chromosome  
35       (YAC). The gene is cloned into a special vector, designed at MIT, that uses control elements from virus genes to express



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the protein-coding exons of the human gene of interest. Exon trapping shows considerable promise as a general technique for identifying those genes in the human genome that cannot be found by cDNA cloning and EST sequencing. Exon amplification will also be useful for identifying the genes in regions of genomic DNA to which disease genes have been mapped. The exon amplification method can be used directly with the cosmid and YAC clones from human chromosomes that are being obtained by both NIH and DOE supported human genome centers. ESTs comprise DNA sequences corresponding to a portion of nuclear encoded messenger RNA. An EST is of sufficient length to permit: (1) amplification of the specific sequence from a cDNA library, e.g., by polymerase chain reaction (PCR); (2) use of a synthetic polynucleotide corresponding to a partial or complete sequence of the EST as a hybridization probe of a cDNA library, generally having 30 - 50 base pairs; or (3) unique designation of the pure cDNA clone from which the EST was derived (the EST clone) for use as a hybridization probe of a cDNA library. Preferably, EST-derived primer pairs and sequences amplify or detectably hybridize to a sequence from a genomic library.

It has been found that sufficient information is contained in the 150-400 base ESTs from one sequencing run to effect preliminary identification and exact chromosome mapping. Accordingly, the ESTs disclosed herein are generally at least 150 base pairs in length. The length of an EST is determined by the quality of sequencing data and the length of the cloned cDNA. Raw data from the automated sequencers is edited to remove low quality sequence at the end of the sequencing run. High quality sequences (usually a result of sequencing templates without excessive salt contamination) generally give about 400 bp of reliable sequence data; other sequences give fewer bases of reliable data. A 150 bp EST is long enough to be translated into a 50 amino acid peptide sequence. This length is sufficient to observe similarities when they exist in a database search. Furthermore, 150 bp is

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long enough to design PCR primers from each end of the sequence to amplify the complete EST. Sequences shorter than 150 bp are difficult to purify and use following PCR amplification. Furthermore, a 150 bp polynucleotide is likely to give a very strong signal with low background in a screen of a genomic library.

Finally, it is highly unlikely that a sequence of the same 150 bp exists in any genes in the genome besides the one tagged by the EST. Some closely related gene family members have very similar nucleotide sequences, but no examples of pairs of human genes with long segments of identical sequence have been reported to date. For instance, there are three known  $\beta$ -tubulin genes in humans. Several ESTs were found that matched one or another of these tubulin genes, but several new members of this gene family were also found and could be clearly distinguished from the three known members. ESTs that match perfectly to several different genes can be detected by hybridizing to chromosomes: if many chromosomal loci are observed, the sequence (or a close variant) is present in more than one gene. This problem can be circumvented by using the 3'-untranslated part of the cDNA alone as a probe for the chromosomal location or for the full-length cDNA or gene. The 3'-untranslated region is more likely to be unique within gene families, since there is no evolutionary pressure to conserve a coding function of this region of the mRNA.

As demonstrated in the Examples that follow, ESTs can be used to map the expressed sequence to a particular chromosome. In addition, ESTs can be expanded to provide the full coding regions, as detailed below. In this manner, previously unknown genes can be identified.

While a variety of cDNA libraries can be used to obtain ESTs, human brain cDNA libraries are exemplified and represent a preferred embodiment. Suitable cDNA libraries can be freshly prepared or obtained commercially, e.g., as shown in Examples 1, 2, and 11. The cDNA libraries from the

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desired tissue are preferably preprocessed by conventional techniques to reduce repeated sequencing of high and intermediate abundance clones and to maximize the chances of finding rare messages from specific cell populations. Preferably, preprocessing includes the use of defined composition prescreening probes, e.g., cDNA corresponding to mitochondria, abundant sequences, ribosomes, actins, myelin basic polypeptides, or any other known high abundance peptide; these prescreening probes used for preprocessing are generally derived from known ESTs. Other useful preprocessing techniques include subtraction, which preferentially reduces the population of certain sequences in the library (e.g., see A. Swaroop et al., *Nucl. Acids Res.* 19, 1954 (1991)), and normalization, which results in all sequences being represented in approximately equal proportions in the library (Patanjali et al, *Proc. Natl. Acad. Sci. USA* 88:1943 (1991)).

The cDNA libraries used in the present method will ideally use directional cloning methods so that either the 5' end of the cDNA (likely to contain coding sequence) or the 3' end (likely to be a non-coding sequence) can be selectively obtained."

Libraries of cDNA can also be generated from recombinant expression of genomic DNA. After they are amplified, ESTs can be obtained and sequenced, e.g., as illustrated in Example 11.

The sequences of the present invention include the specific sequences set forth in the Sequence Listing and designated SEQ ID NO: 1 - SEQ ID NO: 2412. In one aspect of this embodiment, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that comprise the cDNA coding sequences for polypeptides having less than 95% identity with known amino acid sequences (see Table 2) and more preferably less than 90% or 85% identity. In a second aspect, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that encode polypeptides having no similarity to known amino acid

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sequences (see Examples that follow). Precisely because they do not contain coding regions and are therefore more unique in their sequence structures, those sequences which meet neither of the preceding criteria can be most useful and are generally preferred for mapping.

Consistent with the NIH mission and its responsibilities to disseminate knowledge and share the tangible fruits of its research, the present inventors have taken a number of steps to facilitate sequence data and clone availability. All EST sequences have been submitted to GenBank (representing an addition equivalent to 7% of the human nucleotides in Release 69 of GenBank, September 1991). The corresponding cDNA clones have been submitted to the American Type Culture Collection and information on clones and sequences has been submitted to the Genome Data Base (Pearson, P. Nucl. Acids Res. 19 (Suppl.): 2237-9 (1991)).

## II. Complete Coding Sequences from ESTs

The ESTs of the present invention generally represent relatively small coding regions or untranslated regions of human genes. Although most of these sequences do not code for a complete gene product, the ESTs of the present invention are highly specific markers for the corresponding complete coding regions. The ESTs are of sufficient length that they will hybridize, under stringent conditions, only with DNA for that gene to which they correspond. Suitably stringent conditions comprise conditions, for example, where at least 95%, preferably at least 97% or 98% identity (base pairing), is required for hybridization. This property permits use of the EST to isolate the entire coding region and even the entire sequence. Therefore, only routine laboratory work is necessary to parlay the unique EST sequence into the corresponding unique complete gene sequence.

Thus, each of the ESTs of the present invention "corresponds" to a particular unique human gene. Knowledge

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of the EST sequence permits routine isolation and sequencing of the complete coding sequence of the corresponding gene. The complete coding sequence is present in a full-length cDNA clone as well as in the gene carried on genomic clones. Therefore, each EST "corresponds" to a cDNA (from which the EST was derived), a complete genomic gene sequence, a polypeptide coding region (which can be obtained either from the cDNA or genomic DNA), and a polypeptide or amino acid sequence encoded by that region.

The first step in determining where an EST is located in the cDNA is to analyze the EST for the presence of coding sequence, e.g., as described in Example 14. The CRM program predicts the extent and orientation of the coding region of a sequence. Based on this information, one can infer the presence of start or stop codons within a sequence and whether the sequence is completely coding or completely non-coding. If start or stop codons are present, then the EST can cover both part of the 5'-untranslated or 3'-untranslated part of the mRNA (respectively) as well as part of the coding sequence. If no coding sequence is present, it is likely that the EST is derived from the 3'-untranslated sequence due to its longer length and the fact that most cDNA library construction methods are biased toward the 3' end of the mRNA.

One general procedure for obtaining complete sequences from ESTs is as follows:

1. Purify selected human DNA from an EST clone (the cDNA clone that was sequenced to give the EST), e.g., by endonuclease digestion using ECOR1, gel electrophoresis, and isolation of the aforementioned clone by removal from low-melting agarose gel.

2. Radiolabel the isolated insert DNA, e.g., with <sup>32</sup>P labels, preferably by nick translation or random primer labeling.

3. Use the labeled EST insert as a probe to screen a lambda phage cDNA library or a plasmid cDNA library.

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4. Identify colonies containing clones related to the probe cDNA and purify them by known purification methods.

5. Nucleotide sequence the ends of the newly purified clones to identify full length sequences.

5 6. Perform complete sequencing of full length clones by Exonuclease III digestion or primer walking. Northern blots of the mRNA from various tissues using at least part of the EST clone as a probe can optionally be performed to check the size of the mRNA against that of the purported full  
10 length cDNA.

An EST is a specific tag for a messenger RNA molecule. The complete sequence of that messenger RNA, in the form of cDNA, can be determined using the EST as a probe to identify a cDNA clone corresponding to a full-length transcript,  
15 followed by sequencing of that clone. The EST or the full-length cDNA clone can also be used as a probe to identify a genomic clone or clones that contain the complete gene including regulatory and promoter regions, exons, and introns.

20 ESTs are used as probes to identify the cDNA clones from which an EST was derived. ESTs, or portions thereof, can be nick-translated or end-labelled with  $P^{32}$  using polynucleotide kinase using labelling methods known to those with skill in the art. (Basic Methods in Molecular Biology, L.G. Davis, M.D. Dibner, and J.F. Battey, ed., Elsevier Press, NY, 1986). The  
25 lambda library can be directly screened with the labelled ESTs of interest or the library can be converted en masse to pBluescript (Stratagene, La Jolla, California) to facilitate bacterial colony screening. Both methods are well known in the art. Briefly, filters with bacterial colonies containing  
30 the library in pBluescript or bacterial lawns containing lambda plaques are denatured and the DNA is fixed to the filters. The filters are hybridized with the labelled probe using hybridization conditions described by Davis et al. The  
35 ESTs, cloned into lambda or pBluescript, can be used as positive controls to assess background binding and to adjust

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the hybridization and washing stringencies necessary for accurate clone identification. The resulting autoradiograms are compared to duplicate plates of colonies or plaques; each exposed spot corresponds to a positive colony or plaque. The colonies or plaques are selected, expanded and the DNA is isolated from the colonies for further analysis and sequencing.

The ESTs can additionally be used to screen Northern blots of mRNA obtained from various tissues or cell cultures, including the tissue of origin of the EST clone. Northern analysis will most often produce one to several positive bands. The bands can be selected for further study based on the predicted size of the mRNA.

Positive cDNA clones in phage lambda are analyzed to determine the amount of additional sequence they contain using PCR with one primer from the EST and the other primer from the vector. Clones with a larger vector-insert PCR product than the original EST clone are analyzed by restriction digestion and DNA sequencing to determine whether they contain an insert of the same size or similar as the mRNA size on a Northern blot.

Once one or more overlapping cDNA clones are identified, the complete sequence of the clones can be determined. The preferred method is to use exonuclease III digestion (McCombie, W.R., Kirkness, E., Fleming, J.T., Kerlavage, A.R., Iovannisci, D.M., and Martin-Gallardo, R., *Methods*: 3: 33-40, 1991). A series of deletion clones is generated, each of which is sequenced. The resulting overlapping sequences are assembled into a single contiguous sequence of high redundancy (usually three to five overlapping sequences at each nucleotide position), resulting in a highly accurate final sequence.

A similar screening and clone selection approach can be applied to obtaining cosmid or lambda clones from a genomic DNA library that contains the complete gene from which the EST was derived (Kirkness, E.F., Kusiak, J.W., Menninger, J.,

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Gocayne, J.D., Ward, D.C., and Venter, J.C. *Genomics* 10: 985-995 (1991). Although the process is much more laborious, these genomic clones can be sequenced in their entirety also. A shotgun approach is preferred to sequencing clones with inserts longer than 10 kb (genomic cosmid and lambda clones). In shotgun sequencing, the clone is randomly broken into many small pieces, each of which is partially sequenced. The sequence fragments are then aligned to produce the final contiguous sequence with high redundancy. An intermediate approach is to sequence just the promoter region and the intron-exon boundaries and to estimate the size of the introns by restriction endonuclease digestion (ibid.).

Using the sequence information provided herein, the polynucleotides of the present invention can be derived from natural sources or synthesized using known methods. The sequences falling within the scope of the present invention are not limited to the specific sequences described, but include human allelic and species variations thereof and portions thereof of at least 15-18 bases. (Sequences of at least 15-18 bases can be used, for example, as PCR primers or as DNA probes.) In addition, the invention includes the entire coding sequence associated with the specific polynucleotide sequence of bases described in the Sequence Listing, as well as portions of the entire coding sequence of at least 15-18 bases and allelic and species variations thereof. Furthermore, to accommodate codon variability, the invention includes sequences coding for the same amino acid sequences as do the specific sequences disclosed herein. Finally, although the error rate in the automated sequencing used in the present invention is small, there remains some chance of error. Therefore, claims to particular sequences should not be so narrowly construed as to require inclusion of erroneously identified bases or to exclude corrections.

Any specific sequence disclosed herein can be readily screened for errors by resequencing each EST in both directions (i.e., sequence both strands of cDNA).



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The sequences, constructs, vectors, clones, and other materials comprising the present invention can advantageously be in enriched or isolated form. As used herein, "enriched" means that the concentration of the material is at least about 2, 5, 10, 100, or 1000 times its natural concentration (for example), advantageously 0.01%, by weight, preferably at least about 0.1% by weight. Enriched preparations of about 0.5%, 1%, 5%, 10%, and 20% by weight are also contemplated. Further, removal of clones corresponding to ribosomal RNA and "housekeeping" genes and clones without human cDNA inserts results in a library that is "enriched" in the desired clones.

The term "isolated" requires that the material be removed from its original environment (e.g., the natural environment if it is naturally occurring). For example, a naturally-occurring polynucleotide present in a living animal is not isolated, but the same polynucleotide, separated from some or all of the coexisting materials in the natural system, is isolated.

It is also advantageous that the sequences be in purified form. The term "purified" does not require absolute purity; rather, it is intended as a relative definition. Individual EST clones isolated from a cDNA library have been conventionally purified to electrophoretic homogeneity. The sequences obtained from these clones could not be obtained directly either from the library or from total human DNA. The cDNA clones are not naturally occurring as such, but rather are obtained via manipulation of a partially purified naturally occurring substance (messenger RNA). The conversion of mRNA into a cDNA library involves the creation of a synthetic substance (cDNA) and pure individual cDNA clones can be isolated from the synthetic library by clonal selection. Thus, creating a cDNA library from messenger RNA and subsequently isolating individual clones from that library results in an approximately  $10^6$ -fold purification of the native message. Purification of starting material or

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natural material to at least one order of magnitude, preferably two or three orders, and more preferably four or five orders of magnitude is expressly contemplated.

5 In a cDNA library there are many species of mRNA represented. Each cDNA clone can be interesting in its own right, but must be isolated from the library before further experimentation can be completed. In order to sequence any specific cDNA, it must be removed and separated (i.e. isolated and purified) from all the other sequences. This  
10 can be accomplished by many techniques known to those of skill in the art. These procedures normally involve identification of a bacterial colony containing the cDNA of interest and further amplification of that bacteria. Once a cDNA is separated from the mixed clone library, it can be  
15 used as a template for further procedures such as nucleotide sequencing.

Although claims to large numbers of ESTs and corresponding sequences are presented herein, the invention is not limited to these particular groupings of sequences.  
20 Thus, individual sequences are considered as applicants' discoveries or inventions, as are subgroupings of sequences. All of the functional subgroupings set forth in the tables define groupings for which separate claims are contemplated as being within the scope of this invention. Moreover, in  
25 addition to claims to individual clones, it is intended that the present disclosure also support claims to numerical subgroupings. Thus, subgroupings of 50 ESTs (and corresponding sequences) are contemplated (e.g., SEQ ID NOS 1-50, 51-100, 101-150, etc.) as being within the scope of  
30 this invention, as are subgroupings of 5, 10, 25, 100, 200, and 500 ESTs and corresponding sequences.

### III. DNA Constructs

35 The present invention also includes recombinant constructs comprising one or more of the sequences as broadly described above. The constructs comprise a vector, such as

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a plasmid or viral vector, into which a sequence of the invention has been inserted, in a sense or antisense orientation. In a preferred aspect of this embodiment, the construct further comprises regulatory sequences, including  
5 for example, a promoter, operably linked to the sequence. Large numbers of suitable vectors and promoters are known to those of skill in the art, and are commercially available. The following vectors are provided by way of example.

10 **Bacterial:** pBs, phagescript,  $\phi$ X174, pBluescript SK, pBs KS, pNH8a, pNH16a, pNH18a, pNH46a (Stratagene); pTrc99A, pKK223-3, pKK233-3, pDR540, pRIT5 (Pharmacia).

**Eukaryotic:** pWLneo, pSV2cat, pOG44, pXT1, pSG (Stratagene); pSVK3, pBPV, pMSG, pSVL (Pharmacia).

15 Promoter regions can be selected from any desired gene using CAT (chloramphenicol transferase) vectors or other vectors with selectable markers. Two appropriate vectors are pKK232-8 and pCM7. Particular named bacterial promoters include lacI, lacZ, T3, T7, gpt, lambda P<sub>R</sub>, and trc. Eukaryotic promoters include CMV immediate early, HSV  
20 thymidine kinase, early and late SV40, LTRs from retrovirus, and mouse metallothionein-I. Selection of the appropriate vector and promoter is well within the level of ordinary skill in the art.

25 In a further embodiment, the present invention relates to host cells containing the above-described construct. The host cell can be a higher eukaryotic cell, such as a mammalian cell, or a lower eukaryotic cell, such as a yeast cell, or the host cell can be a procaryotic cell, such as a bacterial cell. Introduction of the construct into the host  
30 cell can be effected by calcium phosphate transfection, DEAE dextran mediated transfection, or electroporation (Davis, L., Dibner, M., Battey, I., **Basic Methods in Molecular Biology**, (1986)).

35 The constructs in host cells can be used in a conventional manner to produce the gene product coded by the recombinant sequence. Alternatively, the encoded polypeptide

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can be synthetically produced by conventional peptide synthesizers.

Certain ESTs have already been preliminarily categorized by analogy to related sequences in other organisms (see Table 2). Table 10 of Example 10 categorizes particular ESTs broadly as metabolic, regulatory, and structural sequences where known. Constructs comprising genes or coding sequences corresponding to each of these categories are, therefore, specifically and individually contemplated.

Table 11 more particularly separates 127 new ESTs into 13 categories using a different criteria. These are genes related to cell surface; developmental control; energy metabolism; kinase and phosphatase; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. Table 11 further identifies the EST by the particular gene product for which it apparently codes. Each of these categories individually comprises a preferred category of EST, and preferred constructs and resulting polypeptide can be prepared from those ESTs or the corresponding complete gene sequence.

#### IV. ESTs and Corresponding Sequences as Reagents

Each of the cDNA sequences identified herein (and the corresponding complete gene sequences) can be used in numerous ways as polynucleotide reagents. The sequences can be used as diagnostic probes for the presence of a specific mRNA in a particular cell type. In addition, these sequences can be used as diagnostic probes suitable for use in genetic linkage analysis (polymorphisms). Further, the sequences can be used as probes for locating gene regions associated with genetic disease, as explained in more detail below.

The EST and complete gene sequences of the present invention are also valuable for chromosome identification.

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Each sequence is specifically targeted to and can hybridize with a particular location on an individual human chromosome. Moreover, there is a current need for identifying particular sites on the chromosome. Few chromosome marking reagents based on actual sequence data (repeat polymorphisms) are presently available for marking chromosomal location. The present invention constitutes a major expansion of available chromosome markers. One hundred ESTs have already been mapped to chromosomes. Using the techniques described in Example 5 or 6, the remaining ESTs and the corresponding complete sequences can similarly be mapped to chromosomes. The mapping of ESTs and cDNAs to chromosomes according to the present invention is an important first step in correlating those sequences with genes associated with disease.

Briefly, sequences can be mapped to chromosomes by preparing PCR primers (preferably 15-25 bp) from the ESTs. Computer analysis of the ESTs is used to rapidly select primers that do not span more than one exon in the genomic DNA, thus complicating the amplification process. These primers are then used for PCR screening of somatic cell hybrids containing individual human chromosomes. Only those hybrids containing the human gene corresponding to the EST will yield an amplified fragment.

PCR mapping of somatic cell hybrids is a rapid procedure for assigning a particular EST to a particular chromosome. Three or more clones can be assigned per day using a single thermal cycler. Using the present invention with the same oligonucleotide primers, sublocalization can be achieved with panels of fragments from specific chromosomes or pools of large genomic clones in an analogous manner. Other mapping strategies that can similarly be used to map an EST to its chromosome include in situ hybridization, prescreening with labeled flow-sorted chromosomes and preselection by hybridization to construct chromosome specific cDNA libraries. Results of mapping ESTs to chromosomal segments are listed in Tables 3 and 4.

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Fluorescence in situ hybridization (FISH) of a cDNA clone to a metaphase chromosomal spread can be used to provide a precise chromosomal location in one step. This technique can be used with cDNA as short as 500 or 600 bases; however, clones larger than 2,000 bp have a higher likelihood of binding to a unique chromosomal location with sufficient signal intensity for simple detection. FISH requires use of the clone from which the EST was derived, and the longer the better. 2,000 bp is good, 4,000 is better, and more than 4,000 is probably not necessary to get good results a reasonable percentage of the time. For a review of this technique, see Verma et al., *Human Chromosomes: a Manual of Basic Techniques*. Pergamon Press, New York (1988).

Reagents for chromosome mapping can be used individually (to mark a single chromosome or a single site on that chromosome) or as panels of reagents (for marking multiple sites and/or multiple chromosomes). Reagents corresponding to noncoding regions of the genes actually are preferred for mapping purposes. Coding sequences are more likely to be conserved within gene families, thus increasing the chance of cross hybridizations during chromosomal mapping (see Tables 8 and 9).

Once a sequence has been mapped to a precise chromosomal location, the physical position of the sequence on the chromosome can be correlated with genetic map data. (Such data are found, for example, in V. McKusick, *Mendelian Inheritance in Man* (available on line through Johns Hopkins University Welch Medical Library).) The relationship between genes and diseases that have been mapped to the same chromosomal region are then identified through linkage analysis (coinheritance of physically adjacent genes).

Next, it is necessary to determine the differences in the cDNA or genomic sequence between affected and unaffected individuals. If a mutation is observed in some or all of the affected individuals but not in any normal individuals, then

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the mutation is likely to be the causative agent of the disease.

5 With current resolution of physical mapping and genetic mapping techniques, a cDNA precisely localized to a chromosomal region associated with the disease could be one of between 50 and 500 potential causative genes. (This assumes 1 megabase mapping resolution and one gene per 20 kb.)

10 Comparison of affected and unaffected individuals generally involves first looking for structural alterations in the chromosomes, such as deletions or translocations that are visible from chromosome spreads or detectable using PCR based on that cDNA sequence. Ultimately, complete sequencing of genes from several individuals is required to confirm the  
15 presence of a mutation and to distinguish mutations from polymorphisms.

In addition to the foregoing, the sequences of the invention, as broadly described, can be used to control gene expression through triple helix formation or antisense DNA or  
20 RNA, both of which methods are based on binding of a polynucleotide sequence to DNA or RNA. Polynucleotides suitable for use in these methods are usually 20 to 40 bases in length and are designed to be complementary to a region of the gene involved in transcription (triple helix - see Lee et al, Nucl. Acids Res. 6: 3073 (1979); Cooney et al, Science  
25 241: 456 (1988); and Dervan et al, Science 251: 1360 (1991)) or to the mRNA itself (antisense - Okano, J. Neurochem. 56: 560 (1991); Oligodeoxynucleotides as Antisense Inhibitors of Gene Expression, CRC Press, Boca Raton, FL (1988)). Triple  
30 helix formation optimally results in a shut-off of RNA transcription from DNA, while antisense RNA hybridization blocks translation of an mRNA molecule into polypeptide. Both techniques have been demonstrated to be efficient in model systems. Information contained in the sequences of the  
35 present invention is necessary for the design of an antisense or triple helix oligonucleotide.

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The present invention is also useful tool in gene therapy, which requires isolation of the disease-associated gene in question as a prerequisite to the insertion of a normal gene into an organism to correct a genetic defect.   
5 high specificity of the cDNA probes according to this invention have promise of targeting such gene locations in a highly accurate manner.

The sequences of the present invention, as broadly defined, are also useful for identification of individuals from minute biological samples. The United States military, for example, is considering the use of restriction fragment length polymorphism (RFLP) for identification of its personnel. In this technique, an individual's genomic DNA is digested with one or more restriction enzymes, and probed on   
10 a Southern blot to yield unique bands for identifying personnel. This method does not suffer from the current limitations of "Dog Tags" which can be lost, switched, or stolen, making positive identification difficult. The sequences of the present invention are useful as additional   
15 DNA markers for RFLP.

However, RFLP is a pattern based technique, which does not directly focus on the actual DNA sequence of the individual. The sequences of the present invention can be used to provide an alternative technique that determines the actual base-by-base DNA sequence of selected portions of an individual's genome. These sequences can be used to prepare   
25 PCR primers for amplifying and isolating such selected DNA. One can, for example, take an EST of the invention and prepare two PCR primers from the 5' and 3' ends of the EST. These are used to amplify an individual's DNA, corresponding   
30 to the EST. The amplified DNA is sequenced.

Panels of corresponding DNA sequences from individuals, made this way, can provide unique individual identifications, as each individual will have a unique set of such DNA   
35 sequences, due to allelic differences. The sequences of the present invention can be used to particular advantage to



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obtain such identification sequences from individuals and from tissue, as explained in Examples 12 - 14.

5 The EST sequences from Examples 1 and 2 and the complete sequences from Example 13 uniquely represent portions of the human genome. Allelic variation occurs to some degree in the coding regions of these sequences, and to a greater degree in the noncoding regions. It is estimated that allelic variation between individual humans occurs with a frequency of about once per each 500 bases. Each of the ESTs or complete coding sequences comprising a part of the present invention can, to some degree, be used as a standard against which DNA from an individual can be compared for identification purposes. Because greater numbers of polymorphisms occur in the noncoding regions, fewer sequences are necessary to differentiate individuals. The noncoding sequences of Table 9 for example, could comfortably provide positive individual identification with a panel of perhaps 100 to 1,000 primers which each yield a noncoding amplified sequence of 100 bp. If predicted coding sequences, such as those from Table 6, are used, a more appropriate number of primers for positive individual identification would be 500-2,000.

15 If a panel of reagents from ESTs or complete sequences of this invention is used to generate a unique ID database for an individual, those same reagents can later be used to identify tissue from that individual. Positive identification of that individual, living or dead can be made from extremely small tissue samples.

25 Another use for DNA-based identification techniques is in forensic biology. PCR technology can be used to amplify DNA sequences taken from very small biological samples such as tissues, e.g., hair or skin, or body fluids, e.g., blood, saliva, semen, etc. In one prior art technique, gene sequences are amplified at specific loci known to contain a large number of allelic variations, for example the DQ $\alpha$  class II HLA gene (Erlich, H., PCR Technology, Freeman and Co.

30

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(1992)). Once this specific area of the genome is amplified, it is digested with one or more restriction enzymes to yield an identifying set of bands on a Southern blot probed with DNA corresponding to the DQ $\alpha$  class II HLA gene.

5       The sequences of the present invention can be used to provide polynucleotide reagents specifically targeted to additional loci in the human genome, and can enhance the reliability of DNA-based forensic identifications. Those sequences targeted to noncoding regions (see, e.g., Tables 8 and 9) are particularly appropriate. As mentioned above, actual base sequence information can be used for identification as an accurate alternative to patterns formed by restriction enzyme generated fragments. Reagents for obtaining such sequence information are within the scope of the present invention. Such reagents can comprise complete ESTs or corresponding coding regions, or fragments of either of at least 15 bp, preferably at least 18 bp.

15       There is also a need for reagents capable of identifying the source of a particular tissue. Such need arises, for example, in forensics when presented with tissue of unknown origin. Appropriate reagents can comprise, for example, DNA probes or primers specific to particular tissue prepared from the ESTs or complete sequences of the present invention. Panels of such reagents can identify tissue by species and/or by organ type. In a similar fashion, these reagents can be used to screen tissue culture for contamination.

#### V. Production of Polypeptide Corresponding to ESTs

30       As previously explained, each EST corresponds not only to a coding region, but also to a polypeptide. Once the coding sequence is known, or the gene is cloned which encodes the polypeptide, conventional techniques in molecular biology can be used to obtain the polypeptide.

35       At the simplest level, the amino acid sequence encoded by the polynucleotide sequence can be synthesized using commercially available peptide synthesizers. This is

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particularly useful in producing small peptides and fragments of larger polypeptides. (Fragments are useful, for example, in generating antibodies against the native polypeptide.)

Alternatively, the DNA encoding the desired polypeptide  
5 can be inserted into a host organism and expressed. The organism can be a bacterium, yeast, cell line, or multicellular plant or animal. The literature is replete with examples of suitable host organisms and expression techniques. For example, naked polynucleotide (DNA or mRNA)  
10 can be injected directly into muscle tissue of mammals, where it is expressed. This methodology can be used to deliver the polypeptide to the animal, or to generate an immune response against a foreign polypeptide. Wolff, et al., *Science* 247:1465 (1990); Felgner, et al., *Nature* 349:351 (1991).  
15 Alternatively, the coding sequence, together with appropriate regulatory regions (i.e., a construct), can be inserted into a vector, which is then used to transfect a cell. The cell (which may or may not be part of a larger organism) then expresses the polypeptide. (See Example 25.)

20 Antibodies generated against the polypeptide corresponding to a sequence of the present invention can be obtained by direct injection of the naked polypeptide into an animal (as above) or by administering the polypeptide to an animal, preferably a nonhuman. The antibody so obtained will  
25 then bind the polypeptide itself. In this manner, even a sequence encoding only a fragment of the polypeptide can be used to generate antibodies binding the whole native polypeptide. Such antibodies can then be used to isolate the polypeptide from tissue expressing that polypeptide.  
30 Moreover, a panel of such antibodies, specific to a large number of polypeptides, can be used to identify and differentiate such tissue.

## VI. Examples

35 Certain aspects of the present invention are described in greater detail in the non-limiting Examples that follow.

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## EXAMPLE 1

cDNA Sequences Determined by Random  
Clone Selection: First set

5

## METHODOLOGY:

With reference to the data presented in Table 1, lambda ZAP libraries were converted en masse to pBluescript plasmids, transfected into E. coli XL1-Blue cells, and plated on X-gal/IPTG/ampicillin plates. A total of 1058 clones were picked at random from three human brain cDNA libraries: fetal brain, two-year-old hippocampus, and two-year-old temporal cortex (Stratagene catalog #936206, 936205, 935, respectively. Stratagene, 11099 N. Torrey Pines Rd., La Jolla, CA 92037). An analysis of these clones is summarized in Table I (see below) In addition, clones selected from the hippocampus library were also analyzed after subtractive hybridization with the fibroblast library. These results are listed in the "Hippocampus Subtracted" column of Table 1.

Templates for DNA sequencing were PCR products or plasmids prepared by the alkaline lysis method. About half of the templates prepared by PCR failed to yield an amplified fragment suitable for sequencing. This was primarily due to use of PCR conditions that minimized the need for further purification of the product but also selected against amplification of long inserts (5  $\mu$ l fresh or frozen overnight culture of E. coli carrying the pBluescript plasmid, 7.5  $\mu$ M each dNTP, and 0.1  $\mu$ M each primer for 35 cycles: 94°C, 40 sec; 55°C, 40 sec; 72°C, 90 sec). A further percentage of the PCR-generated templates failed to sequence, largely due to primer-dimer or other amplification artifacts. Qiagen™ columns improved the percentage of plasmid templates, increasing the yields of usable sequence from about 60% with a standard alkaline lysis protocol to over 90%. Overall, 117 PCR-generated templates and 497 plasmid templates resulted in usable sequence. Dideoxy chain termination sequencing reactions were performed with fluorescent dye-labeled M13

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universal or reverse primers. After a cycle sequencing protocol, carried out in a Perkin-Elmer thermal cycler, sequencing reactions were run on an Applied Biosystems, Inc. (Foster City, CA) 373A automated DNA sequencer. (Cycle sequencing was performed in a Perkin Elmer Thermal Cycler for 15 cycles of 95°C, 30 sec; 60°C, 1 sec; 70°C, 60 sec and 15 cycles of 95°C, 30 sec; 70°C, 60 sec with the Applied Biosystems, Inc. Taq Dye Primer Cycle Sequencing Core Kit protocol). Some sequencing reactions were performed on an ABI robotic workstation (Cathcart, *Nature* 347: 310 (1990) hereby incorporated by reference).

**RESULTS:**

Singe-run DNA sequence data were obtained from 609 randomly chosen cDNA clones. The number of clones sequenced from each library is summarized in Table 1. Double-stranded cDNA clones in the pBluescript vector were sequenced by a cycle sequencing protocol with dye-labeled primers and Applied Biosystems, Inc. 373A DNA Sequences. The average length of usable sequence was 397 bases with a standard deviation of 99 bases.

Subtractive hybridization has been used successfully to reduce the population of highly represented sequences in a cDNA library by selectively removing sequences shared by another library. (Schmid and Girou, *Neurochem.* 48: 307 (1987); Fargnoli et al, *Anal. Biochem.* 187: 364 (1990); Duguid and Dinauer, *Nucl. Acids. Res.* 18: 2789 (1990); Schweinfest, et al, *Genet. Anal. Techn. Appl.* 7: 64 (1990); Travis and Sutcliffe, *Proc. Natl. Acad. Sci. USA* 85: 1696 (1988); Kato, *Eur. J. Neurosci.* 2: 704 (1990)). Subtractive hybridization was therefore tested as a way of enhancing the number of brain-specific clones in the hippocampus library by hybridizing the hippocampus library with a WI38 human lung fibroblast cell line cDNA library and removing the common sequences (Schweinfest et al, *Genet. Anal. Techn. Appl.* 7: 64 (1990); Sive and St. John, *Nucl. Acids Res.* 16: 10937

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(1988)). Clones from this subtraction are listed in the column "Hippocampus Subtracted" in Table 1.

The EST sequences from this Example 1 are identified as SEQ ID NOs 1-315.

TABLE 1. cDNA Library Composition Determined  
By Random Clone Sequencing

EST Category	Hippocampus		Hippocampus Subtracted		Fetal Brain		Temporal Cortex	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Databases Match--Human	48	12.8	10	8.6	3	7.9	6	7.5
Mitochondrial Genes	39	10.4	14	12.2	6	15.8	0	0
Repeats: Alu, Line-1, etc.	10	2.7	7	6.0	0	0	11	13.8
Ribosomal RNA	32	8.6	7	6.0	4	10.5	0	0
Other Nuclear Genes	32	8.6	7	6.0	5	13.2	4	5.0
Database Match--Other	160	42.8	44	37.9	20	52.6	6	7.5
No Database Match	53	14.1	24	20.7	0	0	27	33.7
poly A Insert	1	0.3	3	2.6	0	0	26	32.5
No Insert								

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## EXAMPLE 2

Sequencing of Additional ESTs: Second set

Over 2600 additional cDNA clones have been isolated, partially sequenced and screened. The clones were isolated from four human brain cDNA libraries. The new sequences thus discovered, together with the 315 brain ESTs from Example 1, correspond to over 2400 new human genes. These data represent an approximate doubling of the number of human genes identified by DNA sequencing.

Specifically, four cDNA libraries were used as sources of clones for sequencing. Human hippocampus and fetal brain libraries, plasmid template preparation, sequencing reactions, and automated sequencing were performed as described (Adams, M.D., Kelley, J.M., Gocayne, J.D., Dubnick, M., Polymeropoulos, M.H., Xiao, H., Merril, C.R., Wu, A., Olde, B., Moreno, R.F., Kerlavage, A.R., McCombie, W.R., & Venter, J.C. *Science*, 252: 1651-56 (1991)). A pooled probe consisting of inserts from 10 different EST clones with sequences that matched either mitochondrial genes or the 18S or 28S ribosomal RNAs was used to prescreen a gridded filter array of the hippocampus library; nonhybridizing clones are referred to as the "prescreened library". Another fetal brain library was constructed by and was a gift from Bento Soares (Columbia University). A directionally-cloned library was prepared using the method of Rubenstein, et al. (Rubenstein, J., Elizabeth, A., Brice, A., Ciaranello, R., Denney, D., Porteus, M. & Usdin, T. *Nucl. Acids Res.* 18: 4833-4842) using human adult brain mRNA purchased from Clontech (Palo Alto, CA; Catalogue # 6516-1). Of 482 clones analyzed by restriction enzyme digestion, 33% contained inserts at least 1500 base pairs in length. Stratagene hippocampus and fetal brain library totals include data from Adams et al *Science* 252: 1651.

Sequences of nuclear-encoded cDNAs that did not include interspersed repeats (Schmid, C. W. & Jelinek, W. R. *Science*



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216: 1065-1070 (1982); Paulson, K. E., Deka, N., Schmid, C. W., Misra, R., Schlinder, C. W., Rush, M. G., Kadyk, L., & Leinwand, L. *Nature* 316: 359-361 (1985); Fanning, T. G. & Singer, M. F. *Biochem. Biophys. Acta* 910: 203-212 (1987)) were searched against all of GenBank and, in 6-frame translation, against a comprehensive, non-redundant peptide database using the network BLAST (Altschul, S. F., Gish, W., Miller, W., Myers, E.W., & Lipman, D. J. *Mol. Biol.* 215: 403-410 (1990)) server at the National Center for Biotechnology Information. BLAST output was parsed, and an interactive alignment editor was used to select which matches, if any, from each search to record in a relational EST database, which was developed to track sequencing, identification, tissue localization, physical mapping, and the public distribution of the clones, mapping and sequence data. For significant similarities, a putative gene name and Protein Identification Resource (PIR) gene family identification (Barker, W., George, D., Hunt, L., & Garavelli, J. *Nucl. Acids Res.* 19 (Suppl): 2231-2236 (1991)) for the EST were assigned. ESTs without significant matches using BLAST were searched in translation against PIR using FASTA. Ten additional marginal matches were found. A total of 2300 new EST sequences comprising 765,505 nucleotides from the current data set have been submitted to GenBank and assigned accession numbers M77851-M79278 and M85308-M86179. All ESTs except those multiply representing actin, tubulin, and myelin basic protein clones were submitted. ATCC accession numbers of cDNA clones from which ESTs were derived are 77501-78999 and 81000-81756. The Genome Data Base expressed D-segment numbers for these clones are D0S1E - D0S2422E. The ESTs from this Example are identified herein as SEQ ID NOs 316-2407.

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## EXAMPLE 3

EST Characterization: First Set

ESTs including SEQ ID NOs 1-315 were analyzed as follows. Initially, the EST sequences were examined for similarities in the GenBank nucleic acid database (GenBank Release 65.0), Protein Information Resource Release 26.0 (PIR), and ProSite (MacPattern from the EMBL data library, Fuchs R. Comput. Appl. Biosci. 7: 105 (1990) Release 5.0 were used). BLAST was used to search Genbank and the PIR (both maintained by the National Center for Biotechnology Information) ESTs without exact GenBank matches were translated in all six reading frames and each translation was compared with the protein sequence database PIR and the ProSite protein motif database. Comparisons with the ProSite motif database were done by means of the program MacPattern from the EMBL Data Library. GenBank and PIR searches were conducted with the "basic local alignment search tool" programs for nucleotide (BLASTN) and peptide (BLASTX) comparisons (Altschul et al, J. Mol. Biol. 215: 403 (1990)). PIR searches were run on the National Center for Biotechnology Information BLAST network service. The BLAST programs contain a very rapid database-searching algorithm that searches for local areas of similarity between two sequences and then extends the alignments on the basis of defined match and mismatch criteria. The algorithm does not consider the potential gaps to improve the alignment, thus sacrificing some sensitivity for a 6-80 fold increase in speed over other database-searching programs such as FASTA (Pegarson and Lipman, Proc. Natl. Acad. Sci. USA, 85: 2444 (1988)).

Sequence similarities identified by the BLAST programs were considered statistically significant with a Poisson P-value than 0.01. The Poisson P-value less than the probability of as high a score occurring by chance given the number of residues in the query sequence and the database.

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After the BLASTN search, 30 unmatched ESTs were compared against GenBank by FASTA to determine if significant matches were missed due to the use of BLASTN for the database search. No additional statistically significant matches were found. Statistical significance does not necessarily mean functional similarity; some of the reported matches may indicate the presence of a conserved domain or motif or simply a common protein structure pattern. Those ESTs identified as fully corresponding to known human genes or proteins are not included in this disclosure. Statistically significant matches are reported in Table 2, together with the length and percent identity or similarity of each alignment.

On the basis of database searches, 609 EST sequences were classified into eight groups as shown in Table 1 (see Example 1 above). Four groups, with 197 or 32% of the sequences, consist of matches to human sequences: repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes. Forty-eight (8%) of the sequences matched non-human entries in GenBank or PIR while 230 (38%) had no significant matches. The remaining 134 (22%) sequences contained no insert or consisted entirely of polyA between the EcoRI cloning sites.

Thirty-six ESTs matched previously sequenced human nuclear genes with more than 97% identity. Four of these ESTs are from genes encoding enzymes involved in maintaining metabolic energy, including ADP/ATP translocase, aldolase C, hexokinase, and phosphoglycerate kinase. Human homologs of genes for the bovine mitochondrial ATP synthase  $F_0\beta$ -subunit and porcine aconitase were also found (Table 2). Brain-specific cDNAs included synaptophysin, glial fibrillary acidic protein (GFAP), and neurofilament light chain. At least six ESTs are from genes encoding proteins involved in signal transduction: 2',3'-cyclic nucleotide 3'-phosphodiesterase (2 ESTs), calmodulin, c-erbA- $\alpha$ -2,  $G_s\alpha$ , and  $Na^+/K^+$  ATPase  $\alpha$ -subunit. Other ESTs were matches to genes for ubiquitous structural proteins -- actins, tubulins, and

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fodrin (non-erythroid spectrin). ESTs also document the presence in the hippocampus cDNA library of the ret proto-oncogene, the ras-related gene rhoB, and one of the chromosome 22 breakpoint cluster region transcripts. Eight  
5 ESTs are from genes known to be associated with genetic disorders (Online Mendelian Inheritance in Man). More than half of the human-matched ESTs from Example 1 have been mapped to chromosomes, indicating the bias of GenBank entries toward well-studied genes and proteins.

10 ESTs without significant GenBank matches were also compared to the ProSite database of recognized protein motifs. Not counting post-translational-modification signatures, fifty-four sequences contained motifs from the  
15 database. Some patterns, particularly the "leucine zipper", are found in scores or hundreds of proteins that do not share the functional property implied by the presence of the motif.

Similarities to sequences from other organisms were also detected in the BLAST searches of GenBank and PIR (Table 2). Several ESTs displayed similarity to "housekeeping" genes,  
20 including the ribosomal proteins S10 and L30 (rat) and the above glycolytic enzymes. EST00257 (SEQ ID NO:77) shows strong nucleotide sequence similarity to the squid (67%) and Drosophila (70.4%) kinesin heavy chain. Kinesin was first described as a microtubule-associated motor protein involved  
25 in organelle transport in the squid giant axon (Vale et al, Cell 42: 39 (1985)). Six oncogene-related sequences were also among the cDNA clones sequenced. EST00299 (SEQ ID NO:180) and EST00283 (SEQ ID NO:271) show similarity to several ras-related genes and EST00248 (SEQ ID NO:102)  
30 matched the 3' untranslated region of the bovine substrate of botulinum toxin ADP-ribosyltransferase. Similarities with an S. cerevisiae RNA polymerase subunit and Torpedo electromotor neuron-associated protein were also observed. Two ESTs may represent new members of known human gene families: EST00270  
35 matched the three  $\beta$ -tubulin genes with 88-91% identity and

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EST00271 (SEQ ID NO:248) matched  $\alpha$ -actinin with 85% identity at the nucleotide level.

Among the most interesting of the primary sequence relationships was the similarity of ESTs to the *Drosophila* genes Notch and Enhancer of split. Nucleotide and peptide alignments of EST00256 (SEQ ID NO:188) and EST00259 (SEQ ID NO:227) with the *Drosophila* genes have been demonstrated. Both genes are part of a signal cascade encoded by the "neurogenic" genes that are involved in the differentiation of neuronal and epidermal cell lineages in the neuroectoderm of the developing *Drosophila* embryo (Campos-Ortega, *Trends in Neuro. Sci.* 11: 400 (1988)). It has been proposed that the Enhancer of split protein interacts with a membrane protein that is the product of the Notch gene to convert a developmental signal into an altered pattern of gene expression (id. *J. Mol. Biol.* 215: 403 (1990)). EST00256 (SEQ ID NO:188) matches near the 5' end of the Enhancer of split coding sequence, away from the mammalian G protein  $\beta$  subunit- and yeast cdc4-like elements (Hartley et al, *Cell* 55: 785 (1988); Klamt et al. *EMBO J.* 8: 203 (1989)). Part of the EST00259 (SEQ ID NO:227) match to Notch in the cdc10/SW16 region that is similar to three cell-cycle control genes in yeast and is tightly conserved in the *Xenopus* Notch homolog, Xotch. In *Drosophila*, Enhancer of split is absolutely required for formation of epidermal tissue. Notch contains several epidermal growth factor-like repeats and appears to play a general role in cell-cell communication during development (Banerjee and Zipursky, *Neuron* 4:177 (1990)).

Seven genes were represented by more than one EST. Comparisons of all the ESTs against one another revealed two overlaps of unknown ESTs: EST00233 (SEQ ID NO:32) and EST00234 (SEQ ID NO:8) match in opposite orientations and EST00235 (SEQ ID NO:204) and EST00236 (SEQ ID NO:148) match in the same orientation beginning at the same nucleotide. Five human genes were represented by more than one EST:  $\beta$ -

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actin (3),  $\lambda$ -actin (2),  $\alpha$ -tubulin (2),  $\alpha$ -2-macroglobulin (2), and 2'3'-cyclic-nucleotide-3'-phosphodiesterase (2). Those few instances where two or more ESTs represent different portions of a single cDNA can be readily ascertained when the sequence of the full cDNA insert is determined in accordance with Example 13.

#### Example 4

##### EST Sequences Characterization: Second Set

The ESTs of Example 2, including SEQ ID NOs 316-2407, were screened against known sequences listed in GenBank and other databases, as in Example 3. The results are reported in Table 2. The quality of the match is given as percent identity and length in base pairs for nucleotide matches and amino acid residues for peptide matches. In many cases ESTs match multiple domains on several related proteins; for example, EST00825 matches two transmembrane domains on both GABA and Norepinephrine transporters. Nucleotide databases are: GenBank (GB), and EMBL (E); peptide databases are: GenPept (GPU), Swiss-Prot (SP), and PIR.

The great majority (83%) of the partial cDNA sequences reported in Example 2 are unrelated to any sequences previously described in the literature. Based on database matches to known genes from humans as well as from such evolutionarily distant organisms as *E. coli*, yeast, *C. elegans*, *Drosophila*, barley, *Arabidopsis*, rice, and green algae, we have preliminarily identified the functional type of a number of the ESTs (Table 2). These include a novel gene similar to Notch/Tan-1 (Adams et al., *supra*), a new neurotransmitter transporter gene, and a new member of the multi-drug resistance gene family. Several genes involved in development or cell differentiation in *Drosophila* are represented by similar human ESTs, including seven in *absentia* (Carthew, R. & Rubin, G. Cell 63: 561-577 (1990)),

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big-brain (bib) (Rao, Y., Jan, L., & Jan, Y. *Nature* 345: 163-167 (1990)), the discs tumor suppressor (Woods, D. & Bryant, P. *Cell* 66: 1-20 (1991)), and the homeotic gene orthodenticle (Finkelstein, R., Smouse, D. Capaci, T., Spradling, A. & Perrimon, N. *Genes. Dev.* 4: 1516-1527 (1990)). New members of gene families previously known in humans include a  $\text{Ca}^{+2}$ -transporting ATPase, an ADP ribosylation factor, and a new neural-cell adhesion molecule gene.

The 1971 ESTs without a putative identification were analyzed using the coding-region prediction program CRM via the GRAIL server (Uberbacher, E. & Mural, R. *Proc. Natl. Acad. Sci. USA* 88: 11261-5 (1991)). Fifteen percent of the unknown ESTs scored an excellent probability of containing protein-coding sequence. Fifty percent of the ESTs to known human genes contain protein-coding sequences, therefore, at most half of the unknown ESTs are likely to contain coding sequences. We have found no evidence that genomic DNA or cDNA to unspliced precursor RNA is a major contaminant of either the hippocampus or fetal brain library.

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Table 2: ESTs Identified by Database Matches

SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID
208	EST00250	60K filarial antigen	A28209	PIR	108	56.9
2320	EST01784	60K filarial antigen	A28209	PIR	88	50.6
969	EST01982	ADP-ribosylation factor 1	B33283	PIR	84	41.2
1834	EST01620	AMP deaminase, brain	A37056	PIR	57	100.0
97	EST00289	Aconitase	A35544	PIR	105	90.6
251	EST00370	Actin, ether	S10021	PIR	44	51.1
248	EST00271	Actinin, alpha	HUMACTAR	GB	271	85.3
851	EST01891	Actinin, alpha	HUMACTAR	GB	315	81.6
1500	EST02538	Actinin, alpha	HUMACTAR	GB	271	75.0
132	EST00110	Agrin	RATAGR	GB	269	82.2
1852	EST01625	Agrin	RATAGR	GB	103	84.6
1094	EST02113	Ala	HUMALA	GB	92	82.8
691	EST00675	Alcohol dehydrogenase	RICGOS2G_1	GPU	38	59.0
2438	EST00244	Amyloid A4	HUMAFPA4	GB	135	91.9
1955	EST01664	Amyloid A4	A29030	PIR	52	54.7
2068	EST01694	Amyloid A4	ORHUA4	PIR	83	69.0
2092	EST01700	Anion exchanger homolog AC3	A33638	PIR	95	97.9
1880	EST01634	Axonal glycoprotein TAG-1	A34695	PIR	69	87.1
1492	EST02530	B cell-specific Mo-MLV integration site 1 (bmi-1)	MUSBMI1A	GB	111	87.5
1277	EST02306	Bib protein	S09699	PIR	57	53.4
13	EST00255	Cadherins	CADNSHUMAN	SP	41	45.2
1348	EST02378	cAMP-dependent protein kinase inhibitor	MUSPK1	GB	234	91.5
1931	EST01041	cAMP-regulated phosphoprotein	B35308	PIR	21	86.4
1413	EST02447	cAMP-specific phosphodiesterase	HUMPDEAA	GB	363	69.0
396	EST01443	CDPdiacylglycerol-serine O-phosphatidyltransferase	JH0368	PIR	33	41.2
1956	EST01663	Ca2+-transporting ATPase 2	B28065	PIR	125	88.9
1126	EST02146	Calbindin D28	RATCALBD28	GB	81	87.8
1039	EST02055	Calcium channel	S05054	PIR	33	67.6
1910	EST01645	Calmodulin	RATRCM1	GB	120	90.1
485	EST01466	Calmodulin-dependent protein kinase, type II, beta	A26464	PIR	93	98.9
913	EST01913	Clathrin coat assembly protein AP50 homolog	YSCYAP54_1	GPU	62	63.5
2004	EST01676	Cofilin	PIGCOFIL	GB	132	89.5
2400	EST01824	Cysteine-rich intestinal protein	GYRTI	PIR	56	66.7
1588	EST02633	D2223 repetitive DNA	HUMREP	GB	160	76.4
2192	EST01257	Diacylglycerol kinase, lymphocyte	S09156	PIR	44	42.2
1441	EST02477	Diamine acetyltransferase	ATDASHUMAN	SP	74	45.3
650	EST00642	Dilute (myosin heavy chain)	MUSDILUTE_1	GPU	27	100.0
2302	EST01779	Discs-large tumor suppressor	DRODLGA_1	GPU	53	63.0
188	EST00256	Enhancer of split	A30047	PIR	86	58.6
2289	EST01325	Fatty acid synthase	RATFAS	GB	98	79.8
310	EST00377	Fo ATPase beta subunit, mitochondrial	BOVMTASB	GB	293	85.4
1332	EST02362	GA binding protein, beta subunit	MUSGAC_1	GPU	86	90.8
1667	EST00825	Gamma-aminobutyric acid transporter	A35918	PIR	26	59.3
2217	EST01738	Gelation factor ABP-280	A37098	PIR	74	80.0
1412	EST02446	Glutamate-aspartate carrier protein	JV0092	PIR	57	37.9
1070	EST02034	Glutaminase	GLSSRAT	SP	34	74.3
1885	EST01639	Histocompatibility antigen modifier 1	A37779	PIR	63	75.0
1495	EST02533	Hypothetical 43.5K protein	JU0319	PIR	43	52.3
2326	EST01791	Inositol-1,4,5-trisphosphate 3-kinase	JN0129	PIR	65	68.2
SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID

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724	EST01529	Interferon-induced 54K protein	INI4\$HUMAN	SP	76	70.1
1035	EST02051	J1 protein	MUSJ1PRO	GB	362	85.7
1229	EST02258	KUP protein	HUMKUPMR_1	GPU	54	36.4
993	EST02007	Kinase 5 protein	CHKCEK5_1	GPU	68	94.2
77	EST00257	Kinesin	A35075	PIR	57	86.2
78	EST00258	Kinesin	A35075	PIR	62	47.6
2245	EST01748	Kinesin	A35075	PIR	98	52.5
2282	EST01764	Lamin B receptor	A36427	PIR	76	71.4
2173	EST01724	Lon protease	JO0901	PIR	103	41.3
1427	EST02463	Long-chain-fatty-acid-CoA ligase	A36275	PIR	36	62.2
313	EST00276	Lysosomal membrane glycoprotein 1 (LAMP-1)	A31959	PIR	53	46.3
161	EST00247	MARCKS (myristoylated alanine-rich protein kinase	BOVMARCKS	GB	139	83.6
1386	EST02418	MARCKS homolog	MMF52	EU	237	92.4
769	EST00734	MARCKS homolog	S08341	PIR	61	40.3
43	EST00371	Maternal G10 protein	S05955	PIR	38	92.3
1468	EST02505	Matrin 3	RATMATRIN3	GB	137	93.5
639	EST00632	Membrane transport superfamily (GTP-dependent)	A24400	PIR	63	39.1
1894	EST01643	Membrane transport superfamily (GTP-dependent)	A24400	PIR	71	50.0
824	EST01865	Microtubule-associated protein 1B	RATNEU	GB	293	86.4
223	EST00368	Microtubule-associated protein 1B	A33645	PIR	30	54.8
2032	EST01683	Microtubule-associated protein 1B	A33645	PIR	49	62.0
2017	EST01678	Milk fat globule membrane protein	A36479	PIR	48	61.2
1704	EST01580	Myeloid differentiation primary response gene MyD1	MUSMYD118_1	GPU	76	88.3
2226	EST01744	NAD(P)+ transhydrogenase (B-specific)	DEBOXM	PIR	86	93.1
1567	EST02610	Neural cell adhesion molecule L1	S05479	PIR	82	43.4
506	EST01471	Neuraxin	S06017	PIR	120	84.3
1566	EST02609	Neutrophil oxidase factor	A34855	PIR	43	47.7
952	EST01961	Notch/Xotch	HUMTAN1_1	GPU	85	57.0
227	EST00259	Notch/Xotch	A35844	PIR	74	85.3
1395	EST02429	Nuclear factor 1-like protein (NF1)	HAMNF1A	GB	111	92.0
1681	EST01573	Nucleoside diphosphate kinase	A33386	PIR	71	52.8
346	EST01828	Otd homeotic protein	A35912	PIR	35	52.8
2254	EST01751	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase	A28807	PIR	40	90.2
1869	EST00992	Polymyxin B resistance	A32714	PIR	20	76.2
93	EST00287	Processing enhancing protein	S03968	PIR	96	58.8
2353	EST01806	Prohibitin	RATPROHIB_1	GPU	120	97.5
2297	EST01775	Prohormone cleavage enzyme	MUSMPC1A_1	GPU	91	93.5
9	EST00376	Prolyl endopeptidase	PIGPREP	GB	223	83.9
1069	EST02087	Protein kinase C, zeta	HUMPKCL	GB	382	58.7
1933	EST01650	Protein phosphatase 2A beta subunit	HUMPROP2A8	GB	288	76.8
202	EST00298	Protein-tyrosine phosphatase LRP	LRP\$MOUSE	SP	62	44.4
1654	EST01572	Protochlorophyllide reductase	S04783	PIR	34	57.1
38	EST00374	RNA polymerase II 6th subunit (RPO26)	A36352	PIR	72	75.3
1478	EST02515	Rab5	F34323	PIR	91	82.6
2368	EST01389	Radial spoke protein 3	S05962	PIR	58	52.5
37	EST00038	ras p21-like small GTP-binding protein (smg GDS)	BOVSMGGDS	GB	131	89.4
180	EST00299	ras-related proteins	S10493	PIR	51	46.1
1700	EST01579	Retrovirus-related gag polyprotein	FOHUE2	PIR	95	77.1
1511	EST02550	Retrovirus-related pol polyprotein	GNLJGL	PIR	50	54.9
102	EST00248	rho H12/ ARH12	BOVBGBRH	GB	195	79.6
1715	EST01583	Ribosomal protein L18a	R5RT18	PIR	68	95.7
SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID

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1856	EST01627	Ribosomal protein L1a	A24579	PIR	75	63.1
1974	EST01667	Ribosomal protein L3	JQ0771	PIR	74	80.0
301	EST00300	Ribosomal protein L30	R6RT30	PIR	57	96.5
27	EST00301	Ribosomal protein S10	R3RT10	PIR	66	97.0
2402	EST01826	Ribosomal protein S10	R3YM10	PIR	36	51.4
463	EST01459	Ribosomal protein YL10	S11581	PIR	40	68.3
1408	EST02442	Seven in absentia	A36195	PIR	46	80.8
299	EST00249	smg p25A GDP dissociation inhibitor	A35652	PIR	97	77.5
951	EST01960	Spectrin, beta	HUMSPTB	GB	268	67.7
2089	EST01699	Sperm membrane protein	A35981	PIR	52	58.5
2073	EST01697	Succinate dehydrogenase flavoprotein	BOVSDHFP1_1	GPU	44	100.0
2138	EST01715	Succinate dehydrogenase flavoprotein	BOVSDHFP1_1	GPU	49	92.0
430	EST00472	Synaptotagmin (p65)	SY65\$HUMAN	SP	27	53.6
1371	EST02402	Talin	MUSTALINR_1	GPU	79	81.2
1771	EST01601	Thiosulfate sulfurtransferase (rhodanese)	ROBO	PIR	65	81.8
300	EST00232	Transforming protein (dbl)	TVHUB8	PIR	25	65.4
189	EST00282	trkB	A35104	PIR	33	67.6
653	EST01512	Tubulin, alpha	HUMTUBAG	GB	223	75.0
594	EST01490	Tubulin, beta	HUMTB25	GB	298	93.6
757	EST01542	Tubulin, beta	HUMTUBBM	GB	217	90.4
1245	EST02274	Tubulin, beta	A26561	PIR	105	88.7
1147	EST02169	Tyrosine kinase	HUMECK	GB	384	74.3
1701	EST00853	Unc-104	JN0114	NR	36	45.0
2121	EST01711	Valine-tRNA ligase	A29871	PIR	56	57.9
187	EST00152	Wilm's tumor-related protein	HUMQM	GB	228	99.6
1726	EST01588	XPR2 alkaline extracellular protease	B26955	PIR	88	46.1
249	EST00275	Zinc Finger Proteins	S06551	PIR	25	57.7
413	EST01446	Zinc Finger Proteins	S00754	PIR	45	60.9
469	EST01460	Zinc Finger Proteins	C32891	PIR	34	54.3
833	EST01560	Zinc Finger Proteins	S00754	PIR	105	67.0
1230	EST02259	Zinc finger proteins	S00754	PIR	71	62.5
1496	EST02534	Zinc finger proteins	A34612	PIR	50	45.1
2324	EST01352	Zinc Finger Proteins	S10397	PIR	29	56.7

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There is little redundancy in EST sequencing according to the present invention. Of the nuclear-encoded messenger RNAs, the most common ESTs were to the  $\beta$ -actin (0.6% of the EST clones) and myelin basic protein genes (MBP, 0.5% of the clones). MBP, a highly expressed structural component of nerve tissue (Kamholtz, J., de Ferra, F., Puckett, C., & Lazzarini, R. *Proc. Natl. Acad. Sci., USA* 83: 4962-4966 (1986)), displays four alternate splicing forms, of which at least two are present among the ESTs reported here. Other common ESTs were Gs-alpha gamma-actin and both  $\alpha$ - and  $\alpha$ -tubulin.

By matching ESTs to known database sequences, a phenotypic characterization of the tissue begins to emerge. Protein superfamilies matched by ESTs were grouped into three broad functional categories to assess the biological spectrum represented by these randomly selected cDNA clones. Structural and metabolic classes comprised about 30% of the ESTs with database matches. Twenty-five percent were involved in regulatory pathways and the remainder were not classifiable. Eleven of the eighteen enzymes of glycolysis and the citric acid cycle are represented by at least one subunit or isozyme. In addition, several genes not previously known to be expressed in the brain were matched, including spermine/spermidine acetyltransferase (Casero, R., Celano, P., Ervin, S., Applegren, N., Wiest, L. & Pegg, A. *J. Biol. Chem.* 266: 810-814 (1991)) and osteopontin (Young, M., Kerr, J., Termine, J., Wewer, U., Wang, M., McBride, W. & Fisher, L. *Genomics* 7:491-502 (1990)).

#### EXAMPLE 5

##### Mapping of ESTs to Human Chromosomes

Randomly selected ESTs corresponding to SEQ ID NOs. were assigned to chromosomes via PCR (see Table 3). Oligonucleotide primer pairs were designed from EST

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sequences to minimize the chance of amplifying through an intron. The oligonucleotides were 18-23 bp in length and designed for PCR amplification using the computer program INTRON (National Institutes of Mental Health, Bethesda, MD). The program is based on the assumptions that: 1) introns are genomic sequences that interrupt the coding and noncoding sequences of genes (Smith, J. Mol. Evol. 27:45-55 (1988)); 2) there are consensus sequences for splice junctions (Shapiro, et al., Nucl. Acids Res. 15:7155-7174 (1987)); and 3) that 90% of the human genes studied have 3' untranslated regions of mRNA not interrupted by introns in the genomic DNA (Hawkins, Nucl. Acids Res. 16:9893-9908 (1988)).

The program evaluates the likelihood that a given GG or CC dinucleotide represents a former exon-intron boundary. Specifically, every input strand is processed by the INTRON program twice, first evaluating the sense mRNA strand, and then processing the complementary or anti-sense strand. The program evaluates each sequence by finding all GG or CC pairs (possible former splice sites), searching for STOP codons in all three reading frames, and analyzing the GG or CC pairs surrounded by stop codons. All regions of the EST that are unlikely to contain splice junctions based on CC content, GG content, and stop codon frequency are then marked by the program in uppercase.

The creation of PCR primers from known sequences is well known to those with skill in the art. For a review of PCR technology see Erlich, H.A., PCR Technology; Principles and Applications for DNA Amplification. 1992. W.H. Freeman and Co., New York. ESTs were examined for the presence of stop codons in each reading frame and for consensus splice junctions. The presence of stop codons and absence of splice junction sequences are more characteristic of 3' untranslated sequences than of introns. The untranslated sequences are unique to a given gene; thus, primers from

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these regions are less likely to prime other members of a gene family or pseudogenes.

The primers were used in polymerase chain reactions (PCR) to amplify templates from total human genomic DNA. PCR conditions were as follows: 60 ng of genomic DNA was used as a template for PCR with 80 ng of each oligonucleotide primer, 0.6 unit of Tag polymerase, and 1 uCi of a <sup>32</sup>P-labeled deoxycytidine triphosphate. The PCR was performed in a microplate thermocycler (Techne) under the following conditions: 30 cycles of 94°C, 1.4 min; 55°C, 2 min; and 72°C, 2 min; with a final extension at 72°C for 10 min. The amplified products were analyzed on a 6% polyacrylamide sequencing gel and visualized by autoradiography. If the size of the resulting product was equivalent to the EST from which the primers are derived, then the PCR reaction was repeated with DNA templates from two panels of human-rodent somatic cell hybrids; BIOS PCRable DNA (BIOS Corporation) and NIGMS Human-Rodent Somatic Cell Hybrid Mapping Panel Number 1 (NIGMS, Camden, NJ).

PCR was used to screen a series of somatic cell hybrid cell lines containing defined sets of human chromosomes for the presence of a given EST. DNA was isolated from the somatic hybrids and used as starting templates for PCR reactions using the primer pairs from EST sequences selected above. Only those somatic cell hybrids with chromosomes containing the human gene corresponding to the EST will yield an amplified fragment. ESTs were assigned to a chromosome by analysis of the segregation pattern of PCR products from hybrid DNA templates. For a review of techniques and analysis of results from somatic cell gene mapping experiments. (See Ledbetter et al., *Genomics* 6:475-481 (1990).) The single human chromosome present in all cell hybrids that give rise to an amplified fragment represents the chromosome containing that EST.

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The assignment of 100 ESTs and corresponding genes to chromosomes by PCR is shown in Table 3.

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Table 3: Assignment of ESTs to Chromosomes by PCR

SEQ ID	EST#	Chr	PRIMER #1	PRIMER #2
5	EST00012	1	TCCAGGCAATCCCAGAATAG	CTAATTGAGCTCACTGGCCC
57	EST00058	1	CTGTTTGCAAGTTTCAAAGC	GCCATTTCTAACAACCAGAG
64	EST00066	1	GCCATTGTGCTGAATAGAGT	GTTAGTGTTCCTTAGCAAG
83	EST00079	1	CAGCTAATTGACCTGGGCTA	CAACATGCTCTGAGCTTTAG
83	EST00079	1	GGCAGAGCATAATGAGTATA	CATATGCATATGGTCCCTAT
91	EST00086	1	AGTTTAGATGGAGGGCTGTC	TCTGCCCTAATGCGCAGGCT
105	EST00365	1	CTTAATCACCTCCCTTTTGT	CCTTAGTTGGAGATAAGGTC
109	EST00095	1	AGTCTAATCCTGTACACTTG	CGGGCTTTCTCTGAATTGGT
116	EST00100	1	TTAGAAGTGCCCATGGGAGG	TTTTAAGGCTCTGGAGTGTT
141	EST00118	1	CTCAGAGAACTTAGGTGAA	CTACAGAATCATTTACCAG
220	EST00372	1	AAGTTGCACATTGCCCAAGG	ATAGTACTGCAAGGTTATTC
237	EST00187	1	TTACAAATTTCTCTTGACGC	CTGAAGGAGCACAGTTTCTC
242	EST00192	1	GGATCAGATAATCAAACAGG	GCCTTAGGATATGAATGCATA
259	EST00202	1	GCATCACAGTTTAACTGAGG	CTACATATTTGTGCCTCCTT
269	EST00293	1	CTGTTGCTGTGCAGTAGCTT	CCTTTGACCCAGTGAACTT
299	EST00249	1	GATCATGCAGACGTAGATAT	CCAACCTCTGCCAGATCATT
1651	EST00810	1	TAGTCGCTGTAAGTTGATTC	GCTTTGCTGGATGCTTCATT
16	EST00021	2	CAGGCAAGTTTCTTCCAGGA	TCAGACCCATGGTCAGCTT
1898	EST01013	2	GGCTGAGAACGGTTAGCATA	CCCTCAGCTTAGGGGAATG
8	EST00234	2	TAGAAGGCCAACTATGTCCC	GGTTGAGGATTGGCTTTTAC
36	EST00037	2	AGCCAGAAGGCTGCTTAAAG	GCAGTGAACCACTACTCCTA
123	EST00106	2	GTCTAATTTGTAACCTTCAG	GATAGATTGTATAAGAAGCC
192	EST00155	2	GATTTATGTCTGGGAACATA	GCAGCATGTGAAAGAATGAT
200	EST00162	2	TTTAATGGGTGGTGGGAGCT	CGATGCACATCCTTCTCCAT
284	EST00216	2	CCTAAGAATTCTGTTTGGCTC	GTCTGGCACATAATAGATTG
102	EST00248	3	ATACTACATCTAGTCTGG	TTACAGTTCTGTGGTTTC
167	EST00138	3	AAACAGCTGCGGAGTACA	AAAGGATCCTCCACTCCAGA
12	EST00274	3	CCTAGCAAACCTCATAACAC	CATAAGTGAATGGACACAGG
60	EST00062	3	ACACATTAACGGTGCTGCAG	GGAATCAGCCCTTGAGGACT
77	EST00257	3	AAGCTCACAACGCAGATCTG	CTGGAACAGCTTACAAAGGT
107	EST00093	3	ATTGAACCTCTGTCAACAGTG	TGTAAAACAAAGGCCAAACT
108	EST00094	3	AL2 - GCAGGATGTCTGCTTTTGGAG	AGCACACATTATCTACCACGGC
1706	EST00857	3	AL2 - GCAGGATGTCTGCTTTTGGAG	CCAGCACACATTATCTACCACG
37	EST00038	4	AACCTTCGAGTCATGAGAAC	TGTATCGGGCAGTTCTCAG
6	EST00013	4	CACATGTTCTCCCTCTTTCA	GCATTTTGGAGCTCTTCCGT
37	EST00038	4	AL2 - GGAAGTACAGGATTGGC	TTAGAGATGGGATGATGCCG
31	EST00033	5	TGGGTACCCTAAGGTGTTTG	GACTAATCTAAGGTCTAGG
28	EST00030	5	AGATAAGTTAGGAAGCTGGT	ACTCACTGCTAGTATCATCC
59	EST00061	5	AAAGTTTCTTAGCACCCCCC	CAGACTTTGACAAAAGAATC
74	EST00073	5	ATCAGACACGTGGCAGGGTT	AAGTCCCTGAGGGTGCAGAA
121	EST00104	5	TGAAGGCAGCTGCTAAATCT	GGATGTATTGATCTGACTCA
149	EST00123	5	ATACTGTCAACGGAGGGTGA	GTCTGCAGGTTTCTCCTTGA
235	EST00185	5	TTACTGTCCCATCAGATATC	TACACTCTTAAGAAGGTATG
1643	EST00803	5	GAGCGTTTAAAAGAGATTCT	TACAGACAGCCATGTTCCAA
1677	EST00835	5	AL2 - TCTCCAACACAGTCATGC	CGGATGCCATCATATACC
23	EST00026	5	CCTGCAGTGACACTTAACAT	CTGCTCACCTGAAATTGATAC
121	EST00104	5	AL2 - CAGATCAATACATCCTCTGGG	CTGTGCAGTGGTGAGTAAAAGG

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SEQ ID	EST#	Chr	PRIMER #1	PRIMER #2
1	EST00007	6	TAGTTGATGGTCTGGGTTAT	GAAATCCCAGGGAGACAATG
19	EST00023	6	CAACTTACATTAGGGGTTTG	GACCTCATTAGAGAGCCCA
155	EST00129	6	GGAAGCTGCCATATAAGCTC	TCAGTGTCTGACAACTTACC
224	EST00356	6	GCTGTATGTTAACCCTTTGT	TGGAACCCCTCAACACTGCT
288	EST00219	6	ACTTTCATGTTGAGAAGTAT	ATCTAGCTGAAACATTGCTG
1638	EST00798	6	CTTCATCTGTAACTGTTGA	TGAAAATGAGTCACAGGCAG
1675	EST00833	6	AL2 - ACCCAGTTCTCAAAGACC	GGTTTACCATTTCAGAGGC
22	EST00301	6	CTCCGTGATTACCTTCATCT	TTGTAGGTATCTCTGTACGCT
207	EST00167	7	GGTGCTACTTTGTGAATGCT	AGCAATGTGATTTTGTAGG
137	EST00272	7	AGTGGTCACTATCTACATGG	GATTTCAGAACTACTAAGCCG
1659	EST00817	7	TGTATAGGCTCTACATAAG	CTTAATCATGGATTCTTCTCGT
1680	EST00838	7	AL2 - GTTCTTTCCAGGTATGC	TTGTTGGTACTGAGGAAGTGG
292	EST00223	8	TGCAGCAGTGACCATGAGAA	ATCATCTTTCCACGCGGCTT
134	EST00375	9	TCTGGGCTTCTGTGGTTCAA	CTGGCTGCTCAGCAACTCAT
1906	EST01021	9	GGATGTTTTCTATGTACGA	TTCCAGTGCCCTTTTGTCC
1645	EST00804	10	CTCCTTTGGGACAAACAAT	CCAACCCAAACATATTCTA
20	EST00024	10	AGCTGTTCTCTGAGAGATGCA	CCTTGTGAAGAAAGACTTTC
157	EST00131	10	TCAGCAACAGGTCACTTTGG	CTAAGCATCTGCATGTCCAG
172	EST00142	10	TACTAGCATTTCCTACTCTC	TATGCTGATTGTTTGCACCT
250	EST00197	10	GGTGATTAGAGAGTCTGTTG	GAAGTCTGTAGTGTCTTAAA
133	EST00111	11	GGAAATTAGGCTTAGCTCAC	GTGCAGAATACTTAGAGTCC
178	EST00294	11	GTTTGAAGGAAGTGATTTCC	TAGGGCCACCTCCAGTTTCT
10	EST00016	11	GTCTTTGGATTCTACGTAGA	CGATAATGACATTTCTTCTGG
126	EST00109	11	AL2 - CTAACCACAACCCACACATTG	CCTCAGCAACAAGAGAAGATGG
7	EST00014	12	AACCTTGCAACATAAATACTAG	GAGCAATGATTTCTAACAGT
254	EST00200	13	TTGTGTACTGTCTGATAGAC	TAAGCCATGGGCATCTATAA
2409	EST00273	13	GCAAGATGATGGAACATCCC	TTCTTCTGAGGCTCTACA
170	EST00295	14	GGTGCTTAAGGCCACTTTTG	CTTAGAGGATCATAGGTCTG
255	EST00201	14	CCAGGAGAGTAAGAAGATCA	GCAGAGTTGAATATGAACCT
290	EST00221	14	GTGCCAAGATGGCTCATGTA	GTATAGCTTTAAGCCAGTTC
293	EST00224	14	AATGCATTATGCCTGGTCTT	GGAAAAGTCTAGAAGTTAGT
1664	EST00822	14	GGGTGAGAAATTAAGAGGTCT	GTTTCATCTCTAACTCCTTTC
315	EST00008	14	AAGCTGGCTGGGAAATGTTT	GTCATGTCTAGTAAACTTACAC
1689	EST00845	14	AL2 - AGGAGGAAGCTGAAATCC	GGAAGTCCATAAGAGACTCACC
95	EST00088	15	GTGACAGACCATGTCTATTG	AAGTGAGCGATTGCACCTTC
205	EST00165	15	AGGATGACCTGAGTGAGCTG	CCATGGCAGCAAGGAACCTCT
33	EST00034	16	TGTGTGAAAGGGAGTCTTGT	CCATTTTGACTGTTCCATAG
247	EST00279	16	TGGCTAGGGCAGGCCTTAAA	GAGAAGAATATCAAATGGGG
18	EST00373	16	CCATCTGTGTCCCAATTAAGC	AGGGAAGAAGTCTAGAGCGA
68	EST00068	17	CAAAGACGGGAGACGAATGA	AGTGGAACCGGTGGCCTATG
1652	EST00811	17	GAGCTGCATGTTGATAAGTA	TTGACTTAAGCTGACCTTAA
1702	EST00854	17	AL2 - TTGCTGTGGAATCCATGAGAG	GGCAAGTGATCTGTTCTTGG
84	EST00080	19	AGAGATGTCAGTCCATTATC	CTATTCACCTTACTCAAGG
223	EST00368	19	CATCATGTGCGAGACGCATT	TGGATGACCTGAGTCTGCAG
21	EST00025	20	AGTTCTGGAGGCTAGGAGTT	ATGTAAGGACCCCTAGATGG
210	EST00168	20	TGTCAACTTCCCTTTGGCCT	GAAGCTTGTCTATTTCAGGAA
136	EST00113	20	AL2 - TCGGAGAAGTTGCAGTTTCTG	GTTAAAAGCTGTTAGACGGGGC
120	EST00103	22	CACTGACTGACTCCTCTTTA	GGAACCGTAACTCTCCATAG
313	EST00276	X	ATTGACCTTCAATGTAATAA	TTGGATTGGSCAAAATAG

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<u>SEO ID</u>	<u>EST#</u>	<u>Chr</u>	<u>PRIMER #1</u>	<u>PRIMER #2</u>
162	EST00133	X	ATGTGAGCATCTATACCTGC	AATGAAGGCATGAGAATAGG
1669	EST00827	X	CGGACAACTAGGATAAATGC	TACGCGTTTGAATGGCTTGA
1917	EST01029	X	GAATAGCATTATTAGCCAGT	GGACCTATTGGAGATCTACT
1708	EST00858	X	AL2-AAGGCGAGGATTATGTGC	TTCTACTGGGTACACTTCGACC

Abbreviation: AL2: Amino-Link-2 Fluorescent Tag, Chr.: Chromosome.

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The foregoing techniques have been used to further localize 9 ESTs and their associated genes to precise locations onto chromosome 6 or chromosome X, as reflected in Table 4A (in Example 7 below), using sublocalization techniques that employ somatic cell hybrids. ESTs were used as hybridization probes and mapped to other chromosomes using techniques disclosed in Example 7. Somatic cell hybrids were prepared that contained defined subsets of chromosomes 6 and X. Methods for preparing and selecting somatic cell hybrids are known in the art. For a review of an exemplary procedure to generate somatic cell hybrids containing the short arm of human chromosome 6, see Zoghbi, et al., *Genomics* 9(4):713-720 (1991). For a general review of somatic cell hybridization see Ledbetter et al. (*supra*). The hybrids were processed to obtain DNA and analyzed by PCR and by fluorescence in situ hybridization. SEQ ID NOS 19, 22, 1, 224, 288 mapped to chromosome 6, while SEQ ID NOS 162, 1917, 1699 and 1899 mapped to chromosome X using somatic cell hybrids.

#### EXAMPLE 6

##### Mapping of All ESTs to Human Chromosomes

The procedure of Example 5 is repeated for all of the ESTs from Examples 1 and 2 not previously mapped to human chromosomes. Data are generated corresponding to the data in Table 3 for all of the unmapped ESTs. As previously mentioned, virtually all of the ESTs will map to a unique chromosomal location. The inability of any ESTs to localize to a unique location will be readily ascertainable during the mapping process.

Physical mapping of the type reported in Table 4 on all the EST clones reported here would provide human chromosome markers spaced on average every 1.2 megabases and would roughly double the number of expressed sequences that have been localized to chromosomes (McKusick, V. *FASEB*

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J. 5: 12-20 (1991)). Mapped ESTs are also a new resource to identify candidates for the estimated 5000 single-locus disease-associated genes (Id.).

#### EXAMPLE 7

5        Alternative Technique for Mapping to Chromosomes  
         Mapping of ESTs to chromosomes using fluorescence in situ  
         hybridization

10        This technique was used to map an EST to a particular location on a given chromosome. Cell cultures, tissue, or whole blood were used to obtain chromosomes.

15        0.5 ml. of whole blood was added to RPMI 1640 and incubated 96 hours in a 5%CO<sub>2</sub>/37°C incubator. 0.05 ug/ml colcemide was added to the culture one hour before harvest. Cells were collected and washed in PBS. The suspension was incubated with a hypotonic solution of KCl added dropwise to reach a final volume of 5 ml. The cells were spun down and fixed by resuspending the cells in methanol and glacial acetic acid (3:1). The cell suspension was dropped onto glass slides and dried.

20        The slides were treated with RNase A and washed then dehydrated in a series of increasing concentrations of ethanol.

25        The EST to be localized was nick-translated using fluorescently labeled nucleotide (Korenberg, Jr., et al., Cell 53(3):391-400 (1988)). Following nick translation, unincorporated label was removed by spin dialysis through Sepharose. The probe was further extracted with phenol-chloroform to remove additional protein. The chromosomes were denatured in formamide using techniques known in the art and the denatured probe was added to the slides. Following hybridization, the cells were washed. The slides were studied under a fluorescent microscope. In addition, the chromosomes can be stained for G-banding or Q-banding using techniques known in the art.

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The resulting metaphase chromosomes had fluorescent tags localized to those regions of the chromosome that were homologous to the EST. Thus, a particular EST was localized to a particular region on a given chromosome. In this manner, SEQ ID NOS 396, 485, 506, 1880 and 1894 were mapped using fluorescent in situ hybridization to locations on chromosomes 17, 7, 10 and 1 respectively (See Table 4B below). For a review of the technique see Verma et al., *Human Chromosomes: A Manual of Basic Techniques*. Pergamon Press, NY (1988), which is hereby incorporated by reference.

Table 4: Precise Chromosomal Localization of ESTs

	SEQ ID	EST#	Map Location
	-----	-----	-----
15	A.	19	EST00023 6p
		22	EST00301 6p
		1894	EST01643 6p21
		1	EST00007 6q
		224	EST00356 6q
		288	EST00219 6q
20		162	EST00133 Xp11.21 - Xp21.2
		1917	EST01029 Xp11.21 - Xp21.2
		1669	EST00827 Xq26 - Xq27.1
		1899	EST01014 Xq28
25	B.	1880	EST01634 1q32
		485	EST01466 7p13
		506	EST01471 10q11.2
		396	EST01443 17q25

## EXAMPLE 8

Automated DNA Sequencing Accuracy

ESTs that match human sequences in GenBank are excellent tools for the analysis of the accuracy of double-strand automated DNA sequencing. Ninety EST/GenBank matches were examined for the number of nucleotide mismatches and gaps required to achieve optimal alignment by the Genetics Computer Group (GCG) program BESTFIT (Devereux et al, *Nucleic Acids Research* 12: 387 (1984)).

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5 The number of mismatches, insertions and deletions was counted for each hundred bases of the sequence (Table 5). As expected, the sequence quality was best closest to the primer and decreased rapidly after about 400 bases. The number of deletions and insertions relative to the GenBank reference sequence increased five- to ten-fold beyond 400 bases, while the number of mismatches doubled. The average accuracy rate for individual double-stranded sequencing runs was 97.7% to 400 bases.

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TABLE 5. Accuracy Of Single-Run Double-Stranded Automated Sequencing

<u>Bases from Primer</u>	<u>Mismatches/ Ambiguities</u> <sup>+</sup>	<u>Gaps Insertions</u> <sup>+</sup>	<u>Percent Deletions</u> <sup>+</sup>	<u>Aligned Accurate</u>	<u>Bases</u>
101 - 200	1.45	0.18	0.19	98.2	8,800
201 - 300	1.72	0.25	0.11	97.9	8,130
301 - 400	2.07	0.98	0.37	96.6	5,404
>400	3.53	2.63	1.06	92.8	3,197

ESTs statistically identical to known human sequences and those matching mitochondrial and ribosomal genes were aligned with sequenced from GenBank using the GCG program BESTFIT. The first 85 nucleotides was polylinker sequence which was not aligned with the pBluescript SK reference sequence. Tabulation of errors began 15 bases into the BESTFIT alignment and thus is reported beginning with bases 101-200. <sup>+</sup>Error rates are reported as number of mismatches, insertions, or deletions per hundred aligned bases. "Mismatches" includes ambiguous base calls.

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## EXAMPLE 9

Probability of ESTs Containing Coding Sequences

The ESTs of the present invention were statistically evaluated using the coding-region prediction program CRM via the GRAIL server (Uberbacher, E. & Mural, R. Proc. Natl. Acad. Sci. USA, 88: 11261-5 (1991)). The CRM program uses a neural network to combine results from several different coding regions by looking at different 6 bp sequences found in coding exons and in introns. The program additionally conducts reading frame searches and assesses randomness at the third position of codons. This protocol categorizes sequences as having an excellent, good, marginal, or poor probability of containing coding regions. The results are reported in Tables 6-9. There were 219 ESTs categorized as "excellent" (Table 6); 120 categorized as "good" (Table 7); 113 categorized as "marginal" (Table 8); and 1743 categorized as "poor" (Table 9). These results indicate that most ESTs of the present invention comprise noncoding regions.

Table 6: ESTs with Excellent Probability of Containing Coding Sequence

SEQ ID#	EST#				
7	EST00014	973	EST01987	1807	EST00941
15	EST00020	979	EST01993	1809	EST00943
48	EST00291	980	EST01994	1820	EST00951
62	EST00064	986	EST02000	1829	EST00958
66	EST00067	1000	EST02014	1849	EST00975
75	EST00074	1004	EST02018	1860	EST00983
98	EST00260	1007	EST02021	1866	EST00989
106	EST00092	1018	EST02032	1871	EST00994
108	EST00094	1021	EST02035	1888	EST01005
114	EST00098	1034	EST02050	1890	EST01007
115	EST00099	1047	EST02063	1892	EST01009
124	EST00107	1090	EST02109	1903	EST01018
128	EST00252	1096	EST02115	1904	EST01019
156	EST00130	1115	EST02135	1914	EST01026
164	EST00135	1118	EST02138	1930	EST01040
166	EST00137	1129	EST02149	1944	EST01050
174	EST00296	1133	EST02153	1949	EST01054
179	EST00145	1141	EST02163	1962	EST01062
183	EST00148	1163	EST02187	1973	EST01071
201	EST00163	1183	EST02208	1977	EST01075
205	EST00165	1243	EST02272	1982	EST01080
215	EST00172	1264	EST02293	1991	EST01088
230	EST00181	1265	EST02294	1993	EST01090
253	EST00199	1266	EST02295	2000	EST01097
263	EST00203	1287	EST02317	2001	EST01098
268	EST00369	1308	EST02338	2012	EST01106
270	EST00207	1324	EST02354	2013	EST01107
271	EST00283	1344	EST02374	2024	EST01117
273	EST00208	1356	EST02386	2043	EST01131
276	EST00211	1365	EST02396	2051	EST01138
281	EST00214	1383	EST02415	2056	EST01142
285	EST00286	1399	EST02433	2058	EST01144
333	EST00394	1401	EST02435	2059	EST01145
336	EST00397	1405	EST02439	2064	EST01149
339	EST00400	1417	EST02452	2090	EST01167
362	EST00418	1451	EST02487	2094	EST01171
389	EST00440	1457	EST02493	2116	EST01192
441	EST00481	1463	EST02500	2117	EST01193
454	EST00493	1473	EST02510	2128	EST01202
476	EST00509	1479	EST02516	2131	EST01205
493	EST00522	1516	EST02555	2134	EST01208
504	EST00529	1528	EST02569	2144	EST01216
516	EST00538	1531	EST02572	2145	EST01217
518	EST00540	1544	EST02586	2150	EST01222
551	EST01482	1551	EST02593	2155	EST01227
552	EST00565	1558	EST02601	2161	EST01231
559	EST00570	1561	EST02604	2173	EST01238
582	EST00592	1581	EST02625	2174	EST01242
602	EST00606	1586	EST02631	2176	EST01244
606	EST00609	1591	EST02636	2189	EST01255
608	EST00611	1616	EST02661	2214	EST01272
621	EST00620	1624	EST02670	2225	EST01278
635	EST00629	1630	EST02676	2227	EST01279
642	EST00634	1637	EST00796	2233	EST01284
644	EST00636	1639	EST00799	2235	EST01286
687	EST00671	1649	EST00808	2236	EST01287
700	EST00683	1651	EST00810	2255	EST01302
743	EST00714	1677	EST00835	2259	EST01304
753	EST00721	1682	EST00839	2263	EST01307
760	EST00726	1694	EST00849		
764	EST00729	1706	EST00857	SEQ ID#	EST#
808	EST00761	1708	EST00858	2267	EST01756
823	EST01864	1710	EST00860	2281	EST01321
834	EST00771	1716	EST00865	2283	EST01322
886	EST01886			2300	EST01333
919	EST01921	1718	EST00867	2303	EST01335
930	EST01933	1731	EST00879	2303	EST01335
936	EST01939	1742	EST00887	2314	EST01345
948	EST01957	1746	EST00891	2334	EST01358
965	EST01978	1760	EST00903	2339	EST01362
		1767	EST00907	2342	EST01365
		1769	EST00909	2348	EST01371
		1777	EST00913	2358	EST01379
				2367	EST01388



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Table 7: ESTs with Good Probability of Containing Coding Sequence

<u>SEQ ID#</u>	<u>EST#</u>				
		1041	EST02057	2362	EST01383
20	EST00024	1083	EST02102	2378	EST01397
72	EST00071	1099	EST02118	2399	EST01423
82	EST00078	1105	EST02124	2407	EST02714
88	EST00084	1113	EST02133		
137	EST00272	1139	EST02161		
177	EST00328	1146	EST02168		
193	EST00156	1196	EST02221		
200	EST00162	1210	EST02238		
218	EST00175	1233	EST02262		
228	EST00179	1285	EST02314		
247	EST00279	1331	EST02361		
264	EST00204	1388	EST02421		
267	EST00297	1418	EST02453		
296	EST00228	1439	EST02475		
371	EST00426	1502	EST02540		
385	EST00436	1537	EST02578		
392	EST00442	1563	EST02606		
414	EST00460	1599	EST02644		
433	EST00474	1602	EST02647		
453	EST00492	1693	EST00848		
471	EST00505	1695	EST00850		
496	EST00525	1729	EST00877		
524	EST00544	1730	EST00878		
526	EST00546	1738	EST00883		
529	EST00549	1739	EST00885		
549	EST00563	1743	EST00888		
557	EST00569	1768	EST00908		
578	EST00588	1780	EST00916		
596	EST00602	1804	EST00938		
607	EST00610	1805	EST00939		
619	EST00619	1811	EST00945		
657	EST00646	1819	EST00950		
660	EST00649	1826	EST00956		
689	EST00673	1830	EST00959		
695	EST00679	1845	EST00971		
699	EST00682	1848	EST00974		
729	EST00703	1853	EST00977		
742	EST00713	1967	EST01066		
747	EST00717	1992	EST01089		
755	EST00723	1994	EST01091		
759	EST00725	<u>SEQ ID#</u>	<u>EST#</u>		
776	EST00738	1997	EST01094		
778	EST00740	2046	EST01134		
782	EST01551	2101	EST01177		
829	EST00768	2102	EST01178		
835	EST00772	2105	EST01181		
836	EST00773	2106	EST01182		
862	EST01872	2141	EST01213		
881	EST01881	2184	EST01251		
<u>SEQ ID#</u>	<u>EST#</u>	2196	EST01260		
884	EST01884	2203	EST01264		
924	EST01926	2232	EST01283		
929	EST01932	2308	EST01339		
938	EST01941	2345	EST01368		
971	EST01985	2346	EST01369		
995	EST02009	2351	EST01373		
996	EST02010	2354	EST01375		
1031	EST02046	2355	EST01376		
		2359	EST01380		

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Table 8: ESTs with Marginal Probability of Containing Coding Sequence

<u>SEQ ID#</u>	<u>EST#</u>		
11	EST00018	1222	EST02251
12	EST00274	1224	EST02253
24	EST00027	1226	EST02257
45	EST00364	1267	EST02296
79	EST00076	1301	EST02331
90	EST00302	1397	EST02431
110	EST00096	1448	EST02484
144	EST00120	1480	EST02517
145	EST00121	1493	EST02531
192	EST00155	1499	EST02537
222	EST00177	1503	EST02541
234	EST00184	1527	EST02568
277	EST00212	1536	EST02577
319	EST00381	1548	EST02590
368	EST00423	1562	EST02605
370	EST00425	1572	EST02615
387	EST00438	1575	EST02618
402	EST00451	1595	EST02640
415	EST00461	1608	EST02653
418	EST00464	1610	EST02655
426	EST00470	1621	EST02667
503	EST00528	1627	EST02674
517	EST00539	1629	EST02677
522	EST00543	1631	EST02678
532	EST00551	1683	EST00840
540	EST00557	1692	EST00847
570	EST00580	1751	EST00895
573	EST00583	1756	EST00900
576	EST00586	1764	EST02690
613	EST00615	1770	EST00910
617	EST00617	1793	EST00929
626	EST00622	1847	EST00973
681	EST00665	1877	EST00998
726	EST00700	1897	EST01012
727	EST00701	1900	EST01015
738	EST00711	1939	EST01655
745	EST00715	1940	EST01046
752	EST00720	1954	EST01058
791	EST00746	<u>SEQ ID#</u>	<u>EST#</u>
795	EST00749	1990	EST01087
803	EST00756	2008	EST01103
845	EST00777	2031	EST01123
852	EST00782	2041	EST01130
854	EST00784	2044	EST01132
907	EST01907	2060	EST01146
912	EST01912	2100	EST01176
935	EST01938	2136	EST01210
<u>SEQ ID#</u>	<u>EST#</u>	2153	EST01225
968	EST01981	2204	EST01265
985	EST01999	2212	EST01270
988	EST02002	2248	EST01297
1043	EST02059	2250	EST01299
1081	EST02100	2266	EST01310
1089	EST02108	2309	EST01340
1116	EST02136	2347	EST01370
1134	EST02154	2388	EST01406
1205	EST02233	2398	EST01422
		2405	EST01427

Table 9: ESTs with Poor Coding Probability

SEQ ID#	EST#	103	EST00317	204	EST00235	309	EST00174	404	EST00453
1	EST00007	104	EST00354	206	EST00166	315	EST00008	405	EST00454
2	EST00009	105	EST00365	207	EST00167	316	EST00378	406	EST00455
3	EST00010	107	EST00093	209	EST00331	317	EST00379	407	EST00456
4	EST00011	109	EST00095	210	EST00168	318	EST00380	408	EST00457
5	EST00012	111	EST00281	211	EST00332	320	EST00382	409	EST01444
6	EST00013	112	EST00318	212	EST00169	321	EST00383	410	EST00458
8	EST00234	113	EST00097	213	EST00170	322	EST00384	411	EST00459
10	EST00016	116	EST00100	214	EST00171	323	EST00385	412	EST01445
14	EST00019	117	EST00319	216	EST00173	325	EST00386	416	EST00462
16	EST00021	118	EST00101	219	EST00176	326	EST00387	417	EST00463
17	EST00022	119	EST00102	220	EST00372	327	EST00388	419	EST00465
18	EST00373	120	EST00103	221	EST00359	328	EST00389	420	EST00466
19	EST00023	121	EST00104	224	EST00356	329	EST00390	421	EST00467
21	EST00025	122	EST00105	225	EST00178	330	EST00391	422	EST01447
23	EST00026	123	EST00106	226	EST00333	331	EST00392	423	EST00468
25	EST00028	125	EST00108	229	EST00180	332	EST00393	424	EST01448
27	EST00029	126	EST00109	231	EST00334	334	EST00395	425	EST00469
28	EST00030	127	EST00320	232	EST00182	335	EST00396	427	EST01449
29	EST00031	129	EST00321	233	EST00183	337	EST00398	428	EST01451
30	EST00032	130	EST00355	235	EST00185	340	EST00402	429	EST00471
31	EST00033	131	EST00322	236	EST00186	341	EST00403	431	EST00473
32	EST00233	133	EST00111	237	EST00187	342	EST00404	432	EST01452
33	EST00034	134	EST00375	238	EST00188	344	EST00405	434	EST00475
34	EST00035	135	EST00112	239	EST00189	345	EST00406	435	EST00476
35	EST00036	136	EST00113	240	EST00335	347	EST01829	436	EST00477
36	EST00037	138	EST00114	241	EST00191	348	EST01830	437	EST00478
39	EST00039	139	EST00116	242	EST00192	349	EST01831	438	EST00479
40	EST00040	140	EST00117	243	EST00193	350	EST00407	439	EST00480
41	EST00041	141	EST00118	244	EST00194	351	EST00408	440	EST01454
42	EST00042	142	EST00323	245	EST00347	352	EST00409	442	EST01456
46	EST00044	143	EST00119	246	EST00196	353	EST00410	443	EST00482
47	EST00046	146	EST00122	250	EST00197	354	EST01433	444	EST00483
49	EST00047	147	EST00292	252	EST00198	355	EST00411	446	EST00485
50	EST00048	148	EST00236	254	EST00200	356	EST00412	447	EST00486
51	EST00049	149	EST00123	255	EST00201	357	EST00413	448	EST00487
52	EST00052	150	EST00124	256	EST00345	358	EST00414	449	EST00488
53	EST00054	151	EST00125	257	EST00337	359	EST00415	450	EST00489
54	EST00055	152	EST00126	259	EST00202	360	EST00416	451	EST00490
55	EST00056	153	EST00127	260	EST00357	361	EST00417	452	EST00491
56	EST00057	154	EST00128	261	EST00338	363	EST00419	455	EST00494
57	EST00058	155	EST00129	262	EST00339	364	EST00420	457	EST00495
58	EST00059	157	EST00131	265	EST00205	365	EST01434	458	EST00496
59	EST00061	158	EST00132	266	EST00206	366	EST00421	459	EST00497
60	EST00062	159	EST00325	272	EST00340	367	EST00422	460	EST01457
63	EST00065	160	EST00326	274	EST00268	369	EST00424	461	EST01836
64	EST00066	162	EST00133	275	EST00209	372	EST00427	462	EST00498
67	EST00351	163	EST00134	278	EST00342	373	EST01832	464	EST00499
68	EST00068	165	EST00136	279	EST00213	374	EST00428	465	EST00500
69	EST00360	167	EST00138	280	EST00343	375	EST00429	466	EST00501
71	EST00070	168	EST00140	283	EST00215	376	EST01436	467	EST00502
73	EST00072	169	EST00141	284	EST00216	377	EST00430	468	EST00503
74	EST00073	170	EST00295	286	EST00217	378	EST00431	470	EST00504
76	EST00075	171	EST00327	287	EST00218	379	EST00432	SEQ ID#	EST#
80	EST00077	172	EST00142	288	EST00219	380	EST01439	473	EST00506
81	EST00315	173	EST00143	289	EST00220	381	EST00433	474	EST00507
83	EST00079	175	EST00144	290	EST00221	382	EST00434	477	EST01463
84	EST00080	178	EST00294	291	EST00222	SEQ ID#	EST#	478	EST00510
85	EST00081	182	EST00329	292	EST00223	383	EST00435	479	EST00511
86	EST00082	184	EST00149	293	EST00224	384	EST01440	480	EST01464
87	EST00083	185	EST00150	294	EST00225	386	EST00437	481	EST00512
89	EST00085	186	EST00151	SEQ ID#	EST#	388	EST00439	482	EST01465
91	EST00086	190	EST00153	295	EST00226	390	EST01442	483	EST00513
92	EST00087	191	EST00154	297	EST00230	391	EST00441	484	EST00514
94	EST00353	194	EST00157	298	EST00231	393	EST00443	487	EST00516
95	EST00088	SEQ ID#	EST#	302	EST00303	395	EST00445	488	EST00517
96	EST00089	195	EST00158	303	EST00348	397	EST00446	489	EST00518
99	EST00316	196	EST00159	304	EST00307	398	EST00447	490	EST00519
SEQ ID#	EST#	197	EST00160	305	EST00308	399	EST00448	491	EST00520
100	EST00090	198	EST00161	306	EST00309	400	EST00449	492	EST00521
101	EST00091	199	EST00277	307	EST00312	401	EST00450	495	EST00524
		203	EST00164	308	EST00314	403	EST00452	497	EST00526

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498	EST01467	600	EST01492	697	EST00680	799	EST00752	894	EST01894
499	EST01468	601	EST01493	698	EST00681	800	EST00753	895	EST01895
500	EST00527	603	EST01494	701	EST01522	801	EST00754	896	EST01896
501	EST02715	604	EST00607	702	EST00684	804	EST00757	897	EST01897
502	EST01469	605	EST00608	703	EST00685	805	EST00758	898	EST01898
507	EST00530	609	EST01496	704	EST00686	806	EST00759	899	EST01899
508	EST00531	610	EST00612	705	EST00687	807	EST00760	900	EST01900
509	EST01472	611	EST00613	706	EST00688	809	EST00762	901	EST01901
510	EST00532	612	EST00614	708	EST00689	810	EST00763	902	EST01902
511	EST00533	615	EST00616	709	EST00690	811	EST00764	903	EST01903
512	EST00534	616	EST01497	710	EST00691	813	EST00765	904	EST01904
513	EST00535	618	EST01498	711	EST00692	814	EST00766	905	EST01905
514	EST00536	620	EST01499	712	EST00693	815	EST01855	906	EST01906
515	EST00537	622	EST01843	713	EST00694	816	EST01856	908	EST01908
519	EST00541	623	EST00621	714	EST00695	817	EST01857	909	EST01909
520	EST00542	624	EST01500	715	EST01523	818	EST01858	910	EST01910
521	EST01474	625	EST01844	716	EST01524	819	EST01859	911	EST01911
523	EST01838	627	EST00623	717	EST01525	820	EST01860	914	EST01914
525	EST00545	628	EST01503	718	EST00696	822	EST01863	915	EST01915
527	EST00547	629	EST00624	719	EST01526	825	EST01866	916	EST01917
528	EST00548	630	EST01505	720	EST00697	826	EST01867	917	EST01919
530	EST01477	631	EST00625	721	EST01527	827	EST01558	918	EST01920
531	EST00550	632	EST00626	722	EST01528	828	EST00767	920	EST01922
533	EST00552	633	EST00627	723	EST00698	830	EST01559	921	EST01923
534	EST01478	634	EST00628	725	EST00699	831	EST00769	922	EST01924
535	EST00553	636	EST01507	728	EST00702	832	EST00770	923	EST01925
536	EST01479	637	EST00630	730	EST00704	837	EST01561	925	EST01927
537	EST00554	638	EST00631	731	EST00705	838	EST00774	926	EST01929
538	EST00555	640	EST01509	732	EST00706	839	EST01562	927	EST01930
539	EST00556	641	EST00633	733	EST00707	840	EST00775	928	EST01931
541	EST00558	643	EST00635	734	EST00708	841	EST00776	931	EST01934
542	EST01480	645	EST00637	735	EST00709	842	EST01563	932	EST01935
543	EST00559	646	EST00638	736	EST01532	843	EST01564	933	EST01936
544	EST00560	647	EST00639	737	EST00710	844	EST01565	934	EST01937
545	EST01481	648	EST00640	739	EST01534	846	EST00778	937	EST01940
547	EST00561	649	EST00641	740	EST01535	847	EST00779	939	EST01943
548	EST00562	651	EST00643	741	EST00712	848	EST01566	SEQ ID#	EST#
550	EST00564	652	EST01510	744	EST01537	849	EST01567	940	EST01944
553	EST00566	654	EST00644	746	EST00716	850	EST00780	941	EST01945
555	EST01483	655	EST00645	748	EST01850	851	EST00781	942	EST01947
556	EST00568	656	EST01513	749	EST00719	SEQ ID#	EST#	943	EST01948
558	EST01484	658	EST00647	750	EST01539	853	EST00783	944	EST01949
560	EST01485	659	EST00648	751	EST01540	855	EST00785	945	EST01950
561	EST00571	661	EST00650	754	EST00722	856	EST01568	946	EST01953
562	EST00572	662	EST00651	SEQ ID#	EST#	857	EST01868	947	EST01954
563	EST00573	663	EST00652	756	EST01541	858	EST01869	949	EST01958
564	EST00574	664	EST00653	758	EST00724	859	EST01870	950	EST01959
565	EST00575	665	EST00654	761	EST01544	860	EST00786	953	EST01962
566	EST00576	SEQ ID#	EST#	762	EST00727	861	EST01871	954	EST01963
567	EST00577	666	EST01514	763	EST00728	863	EST01873	956	EST01968
568	EST00578	667	EST00655	765	EST00730	864	EST00787	957	EST01969
569	EST00579	668	EST00656	766	EST00731	865	EST01569	958	EST01970
SEQ ID#	EST#	669	EST00657	767	EST00732	866	EST01874	959	EST01972
571	EST00581	670	EST00658	768	EST00733	867	EST01875	960	EST01973
572	EST00582	671	EST00659	770	EST00735	868	EST01876	961	EST01974
574	EST00584	672	EST00660	771	EST01546	869	EST00788	962	EST01975
575	EST00585	673	EST01515	772	EST00736	870	EST00789	963	EST01976
577	EST00587	674	EST01516	774	EST01548	871	EST00790	964	EST01977
580	EST00590	675	EST00661	775	EST00737	872	EST00791	966	EST01979
581	EST00591	676	EST00662	777	EST00739	873	EST00792	967	EST01980
583	EST00593	677	EST00663	779	EST00741	874	EST00793	970	EST01983
584	EST00594	678	EST01517	780	EST01549	875	EST00794	972	EST01986
585	EST00595	679	EST01518	781	EST01550	876	EST00795	974	EST01988
586	EST00596	680	EST00664	783	EST01552	877	EST01877	975	EST01989
587	EST01488	682	EST00666	785	EST01553	878	EST01878	976	EST01990
588	EST00597	683	EST00667	786	EST00742	879	EST01879	977	EST01991
589	EST00598	684	EST00668	787	EST00743	880	EST01880	978	EST01992
590	EST00599	685	EST00669	788	EST00744	882	EST01882	981	EST01995
591	EST01489	686	EST00670	789	EST00745	883	EST01883	982	EST01996
592	EST00600	688	EST00672	790	EST01554	885	EST01885	983	EST01997
593	EST00601	690	EST00674	792	EST00747	887	EST01887	984	EST01998
595	EST01840	692	EST00676	793	EST00748	889	EST01889	987	EST02001
597	EST00603	693	EST00677	794	EST01555	890	EST01890	989	EST02003
598	EST00604	694	EST00678	796	EST00750	892	EST01892	990	EST02004
599	EST00605	696	EST01521	797	EST00751	893	EST01893	991	EST02005

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992	EST02006	1086	EST02105	1184	EST02209	1274	EST02303	1363	EST02394
994	EST02008	1087	EST02106	1185	EST02210	1275	EST02304	1364	EST02395
997	EST02011	1088	EST02107	1186	EST02211	1276	EST02305	1366	EST02397
999	EST02013	1091	EST02110	1187	EST02212	1278	EST02307	1367	EST02398
1001	EST02015	1093	EST02112	1188	EST02213	1279	EST02308	1368	EST02399
1002	EST02016	1095	EST02114	1189	EST02214	1280	EST02309	1370	EST02401
1003	EST02017	1097	EST02116	1190	EST02215	1281	EST02310	1372	EST02403
1005	EST02019	1098	EST02117	1191	EST02216	1282	EST02311	1373	EST02404
1006	EST02020	1100	EST02119	1192	EST02217	1283	EST02312	1375	EST02406
1008	EST02022	1101	EST02120	1193	EST02218	1284	EST02313	1376	EST02407
1009	EST02023	1102	EST02121	1194	EST02219	1286	EST02316	1377	EST02408
1010	EST02024	1104	EST02123	1195	EST02220	1288	EST02318	1378	EST02409
1011	EST02025	1106	EST02125	1197	EST02222	1289	EST02319	1379	EST02410
1012	EST02026	1107	EST02126	1198	EST02223	1290	EST02320	1380	EST02411
1013	EST02027	1108	EST02127	1199	EST02224	1291	EST02321	1381	EST02413
1014	EST02028	1109	EST02128	1200	EST02226	1292	EST02322	1382	EST02414
1015	EST02029	1110	EST02129	1201	EST02228	1293	EST02323		
1016	EST02030	1111	EST02131	1202	EST02229	1294	EST02324		
1017	EST02031	1112	EST02132	1203	EST02230	1295	EST02325		
1019	EST02033	1114	EST02134	1204	EST02232	1296	EST02326		
1022	EST02036	1117	EST02137	1206	EST02234	SEQ ID#	EST#		
1023	EST02037	1119	EST02139	1207	EST02235				
1024	EST02038	1120	EST02140	1208	EST02236	1298	EST02328		
1025	EST02040	1121	EST02141	1209	EST02237	1299	EST02329		
1026	EST02041	1122	EST02142	SEQ ID#	EST#	1300	EST02330		
1027	EST02042	1123	EST02143			1302	EST02332		
1028	EST02043	1124	EST02144	1211	EST02239	1303	EST02333		
1029	EST02044	1125	EST02145	1212	EST02240	1304	EST02334		
1030	EST02045	SEQ ID#	EST#	1213	EST02241	1305	EST02335		
1032	EST02048			1214	EST02242	1306	EST02336		
1033	EST02049	1127	EST02147	1215	EST02244	1307	EST02337		
1036	EST02052	1128	EST02148	1216	EST02245	1309	EST02339		
SEQ ID#	EST#	1130	EST02150	1217	EST02246	1310	EST02340		
1037	EST02053	1131	EST02151	1218	EST02247	1311	EST02341		
1038	EST02054	1132	EST02152	1219	EST02248	1313	EST02343		
1040	EST02056	1135	EST02155	1220	EST02249	1314	EST02344		
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1045	EST02061	1138	EST02159	1225	EST02254	1317	EST02347		
1046	EST02062	1140	EST02162	1226	EST02255	1318	EST02348		
1048	EST02064	1142	EST02164	1227	EST02256	1319	EST02349		
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1050	EST02066	1144	EST02166	1234	EST02263	1321	EST02351		
1051	EST02067	1145	EST02167	1235	EST02264	1322	EST02352		
1052	EST02068	1148	EST02170	1236	EST02265	1323	EST02353		
1053	EST02069	1149	EST02171	1237	EST02266	1325	EST02355		
1054	EST02070	1150	EST02172	1238	EST02267	1326	EST02356		
1055	EST02071	1152	EST02174	1239	EST02268	1327	EST02357		
1056	EST02072	1153	EST02175	1240	EST02269	1328	EST02358		
1057	EST02073	1154	EST02176	1241	EST02270	1329	EST02359		
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1060	EST02076	1157	EST02180	1246	EST02275	1334	EST02364		
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1063	EST02081	1160	EST02183	1249	EST02278	1337	EST02367		
1064	EST02082	1161	EST02184	1250	EST02279	1338	EST02368		
1065	EST02083	1162	EST02185	1251	EST02280	1339	EST02369		
1066	EST02084	1164	EST02188	1252	EST02281	1342	EST02372		
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1068	EST02086	1166	EST02190	1254	EST02283	1345	EST02375		
1070	EST02088	1167	EST02191	1255	EST02284	1346	EST02376		
1071	EST02089	1168	EST02193	1256	EST02285	1347	EST02377		
1072	EST02090	1169	EST02194	1257	EST02286	1349	EST02379		
1073	EST02091	1170	EST02195	1258	EST02287	1350	EST02380		
1074	EST02092	1171	EST02196	1259	EST02288	1351	EST02381		
1075	EST02093	1172	EST02197	1260	EST02289	1352	EST02382		
1076	EST02094	1173	EST02198	1261	EST02290	1353	EST02383		
1077	EST02096	1174	EST02199	1262	EST02291	1354	EST02384		
1078	EST02097	1175	EST02200	1263	EST02292	1355	EST02385		
1079	EST02098	1176	EST02201	1268	EST02297	1357	EST02387		
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1084	EST02103	1179	EST02204	1271	EST02300	1360	EST02391		
1085	EST02104	1180	EST02205	1272	EST02301	1361	EST02392		
		1182	EST02207	1273	EST02302	1362	EST02393		



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1907	EST01022	2016	EST01110	2118	EST01194	2223	EST01742	2332	EST01794
1908	EST01023	2018	EST01111	2119	EST01195	2224	EST01277	2333	EST01357
1909	EST01024	2019	EST01112	2122	EST01197	2228	EST01280	2335	EST01359
1911	EST02694	2020	EST01113	2123	EST01713	2229	EST01281	2336	EST01360
1912	EST01025	2021	EST01114	2124	EST01198	2231	EST01746	2337	EST01361
1913	EST01646	2022	EST01115	2125	EST01199	2237	EST01288	2340	EST01802
1915	EST01027	2023	EST01116	2126	EST01200	2238	EST01289	2341	EST01364
1916	EST01028	2025	EST01118	2127	EST01201	2239	EST01290	2343	EST01366
1917	EST01029	2026	EST01119	2129	EST01203	2240	EST01291	2344	EST01367
1918	EST02695	2027	EST01120	2130	EST01204	2241	EST01747	2349	EST01372
1919	EST01030	2028	EST01121	2132	EST01206	2242	EST01292	2350	EST02708
1920	EST01031	2029	EST01682	2133	EST01207	2243	EST01293	2352	EST01374
1921	EST01647	2030	EST01122	2135	EST01209	2244	EST01294	2356	EST01377
1922	EST01032	2033	EST01684	2137	EST01211	2246	EST01295	2357	EST01378
1923	EST01033	2034	EST01124	2139	EST01716	2247	EST01296	2360	EST01381
1924	EST01034	2035	EST01125	2140	EST01212	2249	EST01298	2361	EST01382
1925	EST01035	2036	EST01126	2142	EST01214	2251	EST01300	2363	EST01384
1926	EST01036	2037	EST01686	2143	EST01215	2252	EST01750	2364	EST01385
1927	EST01037	2038	EST01127	2147	EST01219	2253	EST01301	2365	EST01386
1929	EST01039	2039	EST01128	2148	EST01220	2256	EST02718	2366	EST01387
1932	EST01042	2040	EST01129	2151	EST01223	2257	EST01303	2369	EST01811
1934	EST01043	2042	EST01688	2152	EST01224	2258	EST01754	2370	EST01390
1935	EST01044	2045	EST01133	2154	EST01226	2260	EST01305	2371	EST01391
1936	EST01045	2047	EST01135	2156	EST01718	2261	EST01755	2372	EST01392
1937	EST01652	2048	EST01136	2157	EST01719	2262	EST01306	2375	EST01815
1938	EST01654	2049	EST01689	2158	EST01228	2264	EST01308	2376	EST01395
1941	EST01047	2050	EST01137	2159	EST01229	2265	EST01309	2377	EST01396
1942	EST01048	2052	EST01139	2160	EST01230	2268	EST01311	2379	EST01398
1943	EST01049	2053	EST01140	2162	EST01232	2269	EST01312	2380	EST01399
1945	EST01051	2054	EST01141	2163	EST01233	2270	EST01313	2381	EST01400
1946	EST02696	2055	EST01690	2164	EST01234	2271	EST01314	2382	EST01401
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1952	EST01057	2065	EST01691	2170	EST01239	2277	EST01318	2387	EST01405
1955	EST01662	2066	EST01692	2171	EST01240	2278	EST01319		
1957	EST01059	2067	EST01693	2172	EST01241	2279	EST01320		
1958	EST01060	2069	EST01150	2175	EST01243	2280	EST01763		
1959	EST01061	2070	EST01151	2177	EST01245	2284	EST01323		
1963	EST01063	2072	EST01152	2178	EST01726				
1964	EST01064	2074	EST01698	2179	EST01246				
1966	EST01065	2075	EST01153	2180	EST01247	2285	EST01768		
1968	EST01067	2076	EST02702	2181	EST01248	2287	EST01770		
1969	EST01068	2077	EST01154	SEQ ID#	EST#	2288	EST01324		
1970	EST01666	2078	EST01155			2290	EST01772		
1971	EST01069	2079	EST01156	2182	EST01249	2291	EST01773		
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1975	EST01073	SEQ ID#	EST#	2185	EST01252	2293	EST01327		
1976	EST01074			2186	EST01253	2294	EST01328		
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		2084	EST01161	2191	EST01256	2299	EST01332		
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1981	EST01079	2086	EST01163	2194	EST01729	2304	EST01780		
1983	EST01081	2087	EST01164	2195	EST01259	2305	EST01336		
1984	EST01082	2088	EST01166	2197	EST01261	2306	EST01337		
1985	EST01083	2091	EST01168	2198	EST01730	2310	EST01341		
1986	EST01084	2093	EST01170	2199	EST01262	2311	EST01342		
1988	EST01085	2095	EST01701	2200	EST01731	2312	EST01343		
1989	EST01086	2096	EST01172	2201	EST01263	2313	EST01344		
1995	EST01092	2097	EST01173	2202	EST01732	2315	EST01346		
1996	EST01093	2098	EST01174	2205	EST01735	2316	EST01782		
1998	EST01095	2099	EST01175	2206	EST01736	2317	EST01347		
1999	EST01096	2103	EST01179	2208	EST01267	2318	EST01348		
2002	EST01099	2104	EST01180	2209	EST02717	2319	EST01349		
2003	EST01675	2107	EST01183	2210	EST01268	2321	EST01350		
2005	EST01100	2108	EST01184	2211	EST01269	2322	EST01351		
2006	EST01101	2109	EST01185	2213	EST01271	2323	EST01789		
2007	EST01102	2110	EST01186	2215	EST01273	2325	EST01353		
2009	EST01677	2111	EST01187	2218	EST01274	2327	EST01354		
2010	EST01104	2112	EST01188	2219	EST01275	2328	EST01355		
2011	EST01105	2113	EST01189	2220	EST01740	2329	EST01792		
2014	EST01108	2114	EST01190	2221	EST01741	2330	EST01793		
2015	EST01109	2115	EST01191	2222	EST01276	2331	EST01356		

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<u>SEQ ID#</u>	<u>EST#</u>
2389	EST01407
2391	EST01415
2392	EST01416
2395	EST01419
2397	EST01421
2401	EST01424
2403	EST01425
2404	EST01426
2406	EST02713
2409	EST00273

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## EXAMPLE 10

Functional Groupings of ESTs and Corresponding Genes

By matching new human ESTs to known sequences from other species, the apparent function of the gene corresponding to the EST can be ascertained. The data generated in Example 3 and 4 have been used to categorize 127 of the ESTs of the present invention, and their corresponding genes, into predicted functional groups. (These 127 are ESTs with database matches to sequences from other species for which a function was known.) Two different grouping schemes have been used.

The first scheme separates the sequences into three broad categories: metabolic; regulatory; and structural. These groupings are set out in Table 10.

The second grouping scheme separates the sequences into 13 specific categories: cell surface proteins; developmental control; energy metabolism; kinases and phosphatases; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. These groupings are set out in Table 11.

Table 10: Three-Class Functional Groupings of ESTs

SEQ ID	EST#	Group	Putative Identification
-----			
1834	EST01620	M	AMP deaminase, brain
97	EST00289	M	Aconitase
691	EST00575	M	Alcohol dehydrogenase
2092	EST01700	M	Anion exchanger homolog AE3
396	EST01443	M	CDPdiacylglycerol-serine O-phosphatidyltransferase
1956	EST01663	M	Ca <sup>2+</sup> -transporting ATPase 2
1039	EST02055	M	Calcium channel
2192	EST01257	M	Diacylglycerol kinase, lymphocyte
1441	EST02477	M	Diamine acetyltransferase
2289	EST01325	M	Fatty acid synthase
310	EST00377	M	Fo ATPase beta subunit, mitochondrial
1667	EST00825	M	Gamma-aminobutyric acid transporter
1412	EST02445	M	Glutamate-aspartate carrier protein
1020	EST02034	M	Glutaminase
2326	EST01791	M	Inositol-1,4,5-trisphosphate 3-kinase
2173	EST01724	M	Lon protease
1427	EST02463	M	Long-chain-fatty-acid-CoA ligase
2226	EST01744	M	NAD(P) <sup>+</sup> transhydrogenase (B-specific)
1566	EST02609	M	Neutrophil oxidase factor
1681	EST01573	M	Nucleoside diphosphate kinase
2254	EST01751	M	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase
93	EST00287	M	Processing enhancing protein
2297	EST01775	M	Prohormone cleavage enzyme
9	EST00376	M	Prolyl endopeptidase
1654	EST01572	M	Protochlorophyllide reductase
38	EST00374	M	RNA polymerase II 6th subunit (RPO26)
1715	EST01583	M	Ribosomal protein L18a
1856	EST01627	M	Ribosomal protein L1a
1974	EST01667	M	Ribosomal protein L3
301	EST00300	M	Ribosomal protein L30
22	EST00301	M	Ribosomal protein S10
2402	EST01826	M	Ribosomal protein S10
463	EST01459	M	Ribosomal protein YL10
2073	EST01697	M	Succinate dehydrogenase flavoprotein
2138	EST01715	M	Succinate dehydrogenase flavoprotein
1771	EST01601	M	Thiosulfate sulfurtransferase (rhodanese)
2121	EST01711	M	Valine-tRNA ligase
1726	EST01588	M	XPR2 alkaline extracellular protease
913	EST01913	M	Clathrin coat assembly protein AP50 homolog
1035	EST02051	M	J1 protein
969	EST01982	R	ADP-ribosylation factor 1
1126	EST02146	R	Calbindin D28
1910	EST01645	R	Calmodulin
485	EST01466	R	Calmodulin-dependent protein kinase, type II, beta
2302	EST01779	R	Discs-large tumor suppressor
188	EST00256	R	Enhancer of split
1229	EST02258	R	KUP protein
993	EST02007	R	Kinase 5 protein
2282	EST01764	R	Lamin B receptor
SEQ ID	EST#	Group	Putative Identification
-----			
161	EST00247	R	MARCKS (myristoylated alanine-rich protein kinase)
769	EST00734	R	MARCKS homolog
1386	EST02418	R	MARCKS homolog
227	EST00259	R	Notch/Xotch
952	EST01961	R	Notch/Xotch
1395	EST02429	R	Nuclear factor 1-like protein (NF1)
2353	EST01806	R	Prohibitin
1069	EST02087	R	Protein kinase C, zeta
1933	EST01650	R	Protein phosphatase 2A beta subunit

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202	EST00298	R	Protein-tyrosine phosphatase LRP
1478	EST02515	R	Rab5
1408	EST02442	R	Seven in absentia
300	EST00232	R	Transforming protein (dbl)
1147	EST02169	R	Tyrosine kinase
1348	EST02378	R	cAMP-dependent protein kinase inhibitor
1931	EST01041	R	cAMP-regulated phosphoprotein
1413	EST02447	R	cAMP-specific phosphodiesterase
37	EST00038	R	ras p21-like small GTP-binding protein (smg GDS)
102	EST00248	R	rho H12/ ARH12
299	EST00249	R	smg p25A GDP dissociation inhibitor
189	EST00282	R	trkB
1332	EST02362	R	GA binding protein, beta subunit
1277	EST02306	R	Bib protein
43	EST00371	R	Maternal G10 protein
1704	EST01580	R	Myeloid differentiation primary response gene My
346	EST01828	R	Otd homeotic protein
187	EST00152	R	Wilm's tumor-related protein
249	EST00275	R	Zinc Finger Proteins
413	EST01446	R	Zinc Finger Proteins
469	EST01460	R	Zinc Finger Proteins
833	EST01560	R	Zinc Finger Proteins
1230	EST02259	R	Zinc finger proteins
1496	EST02534	R	Zinc finger proteins
2324	EST01352	R	Zinc Finger Proteins
208	EST00250	S	60K filarial antigen
2320	EST01784	S	60K filarial antigen
251	EST00370	S	Actin, other
2146	EST01218	S	Actin, other
248	EST00271	S	Actinin, alpha
891	EST01891	S	Actinin, alpha
1500	EST02538	S	Actinin, alpha
132	EST00110	S	Agrin
1852	EST01625	S	Agrin
1965	EST01664	S	Amyloid A4
2068	EST01694	S	Amyloid A4
2408	EST00244	S	Amyloid A4
1880	EST01634	S	Axonal glycoprotein TAG-1
2004	EST01676	S	Cofilin
650	EST00642	S	Dilute (myosin heavy chain)
2217	EST01738	S	Gelation factor ABP-280
1885	EST01639	S	Histocompatibility antigen modifier 1
77	EST00257	S	Kinesin
SEQ ID	EST#	Group	Putative Identification
78	EST00258	S	Kinesin
2245	EST01748	S	Kinesin
313	EST00276	S	Lysosomal membrane glycoprotein 1 (LAMP-1)
223	EST00368	S	Microtubule-associated protein 1B
824	EST01865	S	Microtubule-associated protein 1B
2032	EST01683	S	Microtubule-associated protein 1B
2017	EST01678	S	Milk fat globule membrane protein
1567	EST02610	S	Neural cell adhesion molecule L1
506	EST01471	S	Neuraxin
2368	EST01389	S	Radial spoke protein 3
951	EST01960	S	Spectrin, beta
2089	EST01699	S	Sperm membrane protein
653	EST01512	S	Tubulin, alpha
311	EST00270	S	Tubulin, beta
594	EST01490	S	Tubulin, beta
757	EST01542	S	Tubulin, beta
1245	EST02274	S	Tubulin, beta
1589	EST02634	S	Tubulin, beta
1468	EST02505	S	Matrin 3

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1371	EST02402	S	Talin
1701	EST00853	S	Unc-104

Group Key: M: Metabolic, R: Regulatory, S: Structural

Table 11: Thirteen-Class Functional Groupings of ESTs

<u>SEQ ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
208	EST00250	CS	60K filarial antigen
2320	EST01784	CS	60K filarial antigen
1965	EST01664	CS	Amyloid A4
2068	EST01694	CS	Amyloid A4
2408	EST00244	CS	Amyloid A4
1880	EST01634	CS	Axonal glycoprotein TAG-1
1885	EST01639	CS	Histocompatibility antigen modifier 1
313	EST00276	CS	Lysosomal membrane glycoprotein 1 (LAMP-1)
2017	EST01678	CS	Milk fat globule membrane protein
1567	EST02610	CS	Neural cell adhesion molecule L1
2368	EST01389	CS	Radial spoke protein 3
2089	EST01699	CS	Sperm membrane protein
1277	EST02306	DC	Bib protein
188	EST00256	DC	Enhancer of split
43	EST00371	DC	Maternal G10 protein
1704	EST01580	DC	Myeloid differentiation primary response gene MyD1
227	EST00259	DC	Notch/Xotch
952	EST01961	DC	Notch/Xotch
346	EST01828	DC	Orthodentical homeotic protein
1408	EST02442	DC	Seven in absentia
97	EST00289	EM	Aconitase
310	EST00377	EM	Fo ATPase beta subunit, mitochondrial
485	EST01466	KP	Calmodulin-dependent protein kinase, type II, beta
993	EST02007	KP	Kinase 5 protein
1069	EST02087	KP	Protein kinase C, zeta
1933	EST01650	KP	Protein phosphatase 2A beta subunit
202	EST00298	KP	Protein-tyrosine phosphatase LRP
1348	EST02378	KP	cAMP-dependent protein kinase inhibitor
2302	EST01779	OG	Discs-large tumor suppressor
2353	EST01806	OG	Prohibitin
1478	EST02515	OG	Rab5
300	EST00232	OG	Transforming protein (db1)
37	EST00038	OG	ras p21-like small GTP-binding protein (smg GDS)
102	EST00248	OG	rho H12/ ARH12
1834	EST01620	OM	AMP deaminase, brain
691	EST00675	OM	Alcohol dehydrogenase
396	EST01443	OM	CDPdiacylglycerol-serine O-phosphatidyltransferase
2192	EST01257	OM	Diacylglycerol kinase, lymphocyte
1441	EST02477	OM	Diamine acetyltransferase
2289	EST01325	OM	Fatty acid synthase
1020	EST02034	OM	Glutaminase
2326	EST01791	OM	Inositol-1,4,5-trisphosphate 3-kinase
1427	EST02463	OM	Long-chain-fatty-acid-CoA ligase
2226	EST01744	OM	NAD(P)+ transhydrogenase (B-specific)
1566	EST02609	OM	Neutrophil oxidase factor
1681	EST01573	OM	Nucleoside diphosphate kinase

<u>SEQ ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
2254	EST01751	OM	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase
1654	EST01572	OM	Protochlorophyllide reductase
2073	EST01697	OM	Succinate dehydrogenase flavoprotein
2138	EST01715	OM	Succinate dehydrogenase flavoprotein
1771	EST01601	OM	Thiosulfate sulfurtransferase (rhodanese)
2173	EST01724	PI	Lon protease
2297	EST01775	PI	Prohormone cleavage enzyme
9	EST00376	PI	Prolyl endopeptidase
1726	EST01588	PI	XPR2 alkaline extracellular protease
1147	EST02169	PP	Tyrosine kinase
2282	EST01764	RT	Lamin B receptor
189	EST00282	RT	trkB
251	EST00370	SC	Actin, other
2146	EST01218	SC	Actin, other
248	EST00271	SC	Actinin, alpha
891	EST01891	SC	Actinin, alpha
1500	EST02538	SC	Actinin, alpha
132	EST00110	SC	Agrin
1852	EST01625	SC	Agrin
2004	EST01676	SC	Cofilin
650	EST00642	SC	Dilute (myosin heavy chain)
2217	EST01738	SC	Gelation factor ABP-280
77	EST00257	SC	Kinesin
78	EST00258	SC	Kinesin
2245	EST01748	SC	Kinesin
1468	EST02505	SC	Matrin 3
223	EST00368	SC	Microtubule-associated protein 1B
824	EST01865	SC	Microtubule-associated protein 1B
2032	EST01683	SC	Microtubule-associated protein 1B
506	EST01471	SC	Neuraxin
951	EST01960	SC	Spectrin, beta
1371	EST02402	SC	Talin
653	EST01512	SC	Tubulin, alpha
311	EST00270	SC	Tubulin, beta
594	EST01490	SC	Tubulin, beta
757	EST01542	SC	Tubulin, beta
1245	EST02274	SC	Tubulin, beta
1589	EST02634	SC	Tubulin, beta
1701	EST00853	SC	Unc-104
969	EST01982	ST	ADP-ribosylation factor 1
1126	EST02146	ST	Calbindin D28
1910	EST01645	ST	Calmodulin
161	EST00247	ST	MARCKS (myristoylated alanine-rich protein kinase)
769	EST00734	ST	MARCKS homolog
1386	EST02418	ST	MARCKS homolog
1931	EST01041	ST	cAMP-regulated phosphoprotein
1413	EST02447	ST	cAMP-specific phosphodiesterase
299	EST00249	ST	smg p25A GDP dissociation inhibitor

<u>SEQ ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
2092	EST01700	TP	Anion exchanger homolog AE3
1956	EST01663	TP	Ca <sup>2+</sup> -transporting ATPase 2
1039	EST02055	TP	Calcium channel
1667	EST00825	TP	Gamma-aminobutyric acid transporter
1412	EST02446	TP	Glutamate-aspartate carrier protein
913	EST01913	TT	Clathrin coat assembly protein AP50 homolog
1035	EST02051	TT	J1 protein
93	EST00287	TT	Processing enhancing protein
38	EST00374	TT	RNA polymerase II 6th subunit (RPO26)
1715	EST01583	TT	Ribosomal protein L18a
1856	EST01627	TT	Ribosomal protein L1a
1974	EST01667	TT	Ribosomal protein L3
301	EST00300	TT	Ribosomal protein L30
22	EST00301	TT	Ribosomal protein S10
2402	EST01826	TT	Ribosomal protein S10
463	EST01459	TT	Ribosomal protein YL10
2121	EST01711	TT	Valine-tRNA ligase
1332	EST02362	TX	GA binding protein, beta subunit
1229	EST02258	TX	KUP protein
1395	EST02429	TX	Nuclear factor 1-like protein (NF1)
187	EST00152	TX	Wilm's tumor-related protein
249	EST00275	TX	Zinc Finger Proteins
413	EST01446	TX	Zinc Finger Proteins
469	EST01460	TX	Zinc Finger Proteins
833	EST01560	TX	Zinc Finger Proteins
1230	EST02259	TX	Zinc finger proteins
1496	EST02534	TX	Zinc finger proteins
2324	EST01352	TX	Zinc Finger Proteins

Group Key: CS: Cell Surface, DC: Developmental Control, EM: Energy Metabolism, KP: Kinases and Phosphatases, OG: Oncogenes, OM: Other Metabolism, PI, Peptidases and Peptidase Inhibitors, RT: Receptors, SC: Structural and Cytoskeletal, ST: Signal Transduction, TP: Transporters, TT: Transcription, Translation, and Subcellular Localization, TX: Transcription Factors.

## EXAMPLE 11

CDNA Libraries Generated From Specific Genomic DNA  
by Exon Expression & Amplification

5

Exon amplification was used to express potential exons from genomic DNA in a recombinant vector that contains some of the signals necessary for splicing. If an exon is present in the proper orientation in the vector, that exon will be spliced in a mammalian cell and will become part of the mRNA of that cell. The exon splice-product can be purified from other mRNA in the cell by conversion of the mRNA to cDNA and selective amplification of the recombinant splice-product cDNAs. Cosmid DNA from human chromosome 19q13.3 was digested with BamHI or BamHI/BglII restriction enzymes. The fragments generated were collected and size specifically cloned into an expression vector (Buckler, et al. Proc. Nat'l. Acad. Sci. USA, 88:4005-4009 (1991)). After transfection by electroporation of these constructs into COS cells, RNA transcripts were generated using the SV40 early promoter and a polyadenylation signal derived from SV40 both present in the expression vector. When a fragment of genomic DNA contains an entire exon with flanking intron sequence in the sense orientation, the exon should be retained in the mature poly(A)+ cytoplasmic RNA. Therefore, the mRNA was used as template for cDNA synthesis using reverse transcriptase and vector-priming. Subsequently, the cDNAs were amplified by vector-priming using PCR. A fraction of this first PCR product was reamplified using internal vector-primers containing terminal cloning sites. These products were end-repaired with T4 DNA polymerase, digested with the appropriate restriction enzymes, gel purified and cloned into pBluescript vectors. The constructs were transfected into XL1-Blue competent cells and plated on LB/X-gal/IPTG/ampicillin plates. White colonies were selected and expanded to prepare DNA templates as described in Example 2.

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When multiple cosmids or YAC clones were used as the source DNA, a pool of specific expressed exons was obtained as a cDNA library. The EST/cDNAs sequenced from this specific library are disclosed herein as SEQ ID NOS: 2412-2417.

## EXAMPLE 12

### PCR Amplification from Predicted Exons

Computational analyses can be applied to genomic DNA sequences to predict protein coding regions. The coding region prediction program CRM (E. Uberbacher and R. Mural, *Proc. Natl. Acad. Sci. USA* 88:11261-5 (1991)) finds open reading frames and classifies them according to their probability of being coding regions. These regions are subsequently examined using the GM program (C. Fields and C. Soderlund, *Comp. Applic. Biosci.* 6: 263, 1990), which predicts intron-exon structure. PCR primers are then designed to amplify the predicted exons and used to test human cDNA libraries (for example, fetal brain or placental libraries) for the presence of these putative exons using a PCR assay.

This strategy has been successfully applied in two large scale genomic sequencing projects, the Huntington's locus of human chromosome 4p16.3 (McCombie, et al., submitted) and human chromosome locus 19q13.3 (Martin-Gallardo, et al., submitted). Sequences from eleven predicted exons from chromosome 4 were present in tested cDNA libraries, indicating that this region has at least two and probably three expressed genes. In one case, the method resulted in an amplification product which spanned two predicted exons. (SEQ ID NO: 2411.) When sequenced, this PCR product indicated the presence of the two exons from which the primers were initially chosen, as well as an intervening exon which was also predicted by the CRM program, but not the intervening genomic sequences. In a similar fashion, the presence of the two predicted genes in the chromosome 19

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sequence was confirmed by sequencing PCR products. SEQ ID NO 2410, includes a partial exon of one of these genes.

### EXAMPLE 13

#### 5                    Complete Sequence of EST Clone Inserts

10                   There are a number of methods known to those with skill  
in the art of molecular biology, to obtain sequence  
information from the cDNAs corresponding to the EST  
sequences. Procedures for these methods are provided in  
15                   Basic Methods in Molecular Biology (David et al. *supra*). One  
way to acquire more information about the cDNA from which an  
EST was derived is to sequence the remainder of the cDNA  
clone. The complete sequence of the inserts of four EST  
clones (representing SEQ ID NOs 188, 189, 223, and 227) was  
20                   determined using Exonuclease III deletions. Briefly, EST  
clones were digested with the restriction enzymes SalI and  
KpnI or PstI and BamHI (for deletions from the Forward primer  
and Reverse primer ends of the insert, respectively). The  
KpnI and PstI enzymes leave 3' sticky ends following  
25                   digestion, which Exonuclease III is unable to bind. This  
results in unidirectional deletions into the cDNA insert  
leaving the vector sequence undisturbed. After addition of  
Exonuclease III to the Forward and Reverse deletion  
reactions, aliquots of the reaction were removed at defined  
30                   time intervals and the reaction was stopped to prevent  
further deletion. S1 nuclease and Klenow DNA polymerase were  
added to create blunt ended fragments suitable for ligation.

35                   Samples for each time point was purified by  
electrophoresis through an agarose gel and religated. Two to  
four representative clones from each time point in each  
direction were sequenced to give between 200 and 400 base  
pairs of sequence data. Careful selection of deletion  
conditions and time points allow a deletion series of  
approximately 100-200 base pairs difference in length at each  
consecutive time point. Sequence fragments were reassembled  
into a redundant contiguous sequence using the INHERIT

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software from Applied Biosystems, Inc. (Foster City, CA). In this way, the complete insert from these four cDNA clones was sequenced on both strands to an average redundancy between three and four (each base was sequenced between three and four times, on average). Those complete insert sequences are disclosed herein as SEQ ID 2418, 2419, 2420, and 2421, corresponding to original ESTs with SEQ ID 223, 189, 227, and 188, respectively.

#### EXAMPLE 14

##### Determining Reading Frame, Orientation, Coding Regions: ESTs and Complete cDNA Sequences

Once the complete cDNA sequence has been determined in accordance with Example 13, the reading frame, orientation, and coding regions are determined by computer techniques. (The complete coding region is considered to be the largest open reading frame from a methionine to a stop codon.)

Specifically, the CRM program on the GRAIL server is used as explained in Example 9 to determine probable coding regions. This information is supplemented by location of start and stop codons. Where possible, the results of the CRM analysis are validated by comparison of the cDNA sequence to known sequences using database matching, in accordance with Examples 3 and 4. If a match of 50% (or even less) is found in any particular reading frame and orientation, this serves to verify corresponding CRM results. Alternatively, database matches can be used to determine reading frame and orientation without use of the CRM program. Of course, if the cDNA is derived from a directional library, the probable orientation is already known.

#### EXAMPLE 15

##### Preparation of PCR Primers and Amplification of DNA

The EST sequences and the corresponding cDNA sequences and genomic sequences may be used, in accordance with the

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present invention, to prepare PCR primers for a variety of applications. The PCR primers are preferably at least 15 bases, and more preferably at least 18 bases in length. The procedure of Example 5 is repeated using the desired EST, or  
5 using the corresponding cDNA or genomic DNA sequence from Example 13. It is preferred that the primer pairs have approximately the same G/C ratio, so that melting temperatures are approximately the same. When screening cDNA, introns are of no concern; however, when screening  
10 genomic DNA, primers should be selected to avoid reading across introns, which usually are too large to amplify. The PCR primers and amplified DNA of this Example find use in the Examples that follow.

#### EXAMPLE 16

##### Forensic Matching by DNA Sequencing

20 In one exemplary method, DNA samples are isolated from forensic specimens of, for example, hair, semen, blood or skin cells by conventional methods. A panel of PCR primers derived from a number of the sequences of Example 1, 2, 11, 12 and/or 13 is then utilized in accordance with Example 12  
25 to obtain DNA of approximately 100-200 bases in length from the forensic specimen. Corresponding sequences are obtained from a suspect. Each of these identification DNAs is then sequenced, and a simple database comparison determines the differences, if any, between the sequences from the suspect  
30 and those from the sample. Statistically significant differences between the suspect's DNA sequences and those from the sample conclusively prove a lack of identity. This lack of identity can be proven, for example, with only one sequence. Identity, on the other hand, should be  
35 demonstrated with a large number of sequences, all matching. Preferably, a minimum of 50 statistically identical sequences

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of 100 bases in length are used to prove identity between the suspect and the sample.

#### EXAMPLE 17

##### Positive Identification by DNA Sequencing

The technique outlined in the previous example may also be used on a larger scale to provide a unique fingerprint-type identification of any individual. In this technique, primers are prepared from a large number of sequences from Examples 1, 2, 11, 12 and/or 13. Preferably, 20 to 50 different primers are used. These primers are used to obtain a corresponding number of PCR-generated DNA segments from the individual in question in accordance with Example 15. Each of these DNA segments is sequenced, using the methods set forth in Example 1. The database of sequences generated through this procedure uniquely identifies the individual from whom the sequences were obtained. The same panel of primers may then be used at any later time to absolutely correlate tissue or other biological specimen with that individual.

#### EXAMPLE 18

##### Southern Blot Forensic Identification

The procedure of Example 17 is repeated to obtain a panel of from 10 to 2000 amplified sequences from an individual and a specimen. This PCR-generated DNA is then digested with one or a combination of, preferably, four base specific restriction enzymes. Such enzymes are commercially available and known to those of skill in the art. After digestion, the resultant gene fragments are size separated in multiple duplicate wells on an agarose gel and transferred to nitrocellulose using Southern blotting techniques well known to those with skill in the art. For a review of Southern

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blotting see Davis et al. (Basic Methods in Molecular Biology, 1986, Elsevier Press. pp 62-65).

5 A panel of ESTs or complete cDNA sequences from Examples 1, 2, and/or 13, or fragments thereof of at least 15 bases, are radioactively or colorimetrically labeled using end-labeled oligonucleotides derived from the ESTs, nick translated sequences or the like using methods known in the art and hybridized to the Southern blot using techniques known in the art (Davis et al., supra). Preferably, at least 10 5 to 10 of these labeled probes are used, and more preferably at least about 20 or 30 are used to provide a unique pattern. The resultant bands appearing from the hybridization of a large sample of ESTs will be a unique identifier. Since the restriction enzyme cleavage will be different for every 15 individual, the band pattern on the Southern blot will also be unique. Increasing the number of EST probes will provide a statistically higher level of confidence in the identification since there will be an increased number of sets of bands used for identification.

#### EXAMPLE 19

##### Dot Blot Identification Procedure

25 Another technique for identifying individuals using the sequences disclosed herein utilizes a dot blot hybridization technique.

30 Genomic DNA is isolated from nuclei of subject to be identified. Oligonucleotide probes of approximately 30 bp in length were synthesized that correspond to sequences from the ESTs. The probes are used to hybridize to the genomic DNA through conditions known to those in the art. The oligonucleotides are end labelled with  $P^{32}$  using polynucleotide kinase (Pharmacia). Dot Blots are created by 35 spotting about 50 ng cDNA of at least 10, preferably at least 50 sequences corresponding to a variety of the Sequence ID

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5 NOs provided in Table 7 onto nitrocellulose or the like using  
a vacuum dot blot manifold (BioRad, Richmond California).  
The nitrocellulose filter containing the EST clone sequences  
is baked or UV linked to the filter, prehybridized and  
10 hybridized with labeled probe using techniques known in the  
art (Davis et al. supra). The  $^{32}\text{P}$  labeled DNA fragments are  
sequentially hybridized with successively stringent  
conditions to detect minimal differences between the 30 bp  
sequence and the DNA. Tetramethylammonium chloride is useful  
15 for identifying clones containing small numbers of nucleotide  
mismatches (Wood et al., Proc. Natl. Acad. Sci. USA  
82(6):1585-1588 (1985) which is hereby incorporated by  
reference. A unique pattern of dots distinguishes one  
individual from another individuals.

#### EXAMPLE 20

##### Alternative "Fingerprint" Identification Technique

20 EST sequences and the corresponding complete cDNA  
sequences can be used to create a unique fingerprint for an  
individual. Thus pools of EST sequences can be used in  
forensics, paternity suits or the like to differentiate one  
individual from another.

25 Entire EST sequences can be used; similarly  
oligonucleotides can be prepared from EST sequences. In this  
example, 20-mer oligonucleotides are prepared from 200 EST  
sequences using commercially available oligonucleotide  
services such as Oligos Etc., Wilsonville, OR. Patient cell  
30 samples are processed for DNA using techniques well known to  
those with skill in the art. The nucleic acid is digested  
with restriction enzymes EcoRI and XbaI. Following  
digestion, samples are applied to wells for electrophoresis.  
The procedure, as known in the art, may be modified to  
35 accommodate polyacrylamide electrophoresis, however in this  
example, samples containing 5 ug of DNA are loaded into wells

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and separated on 0.8% agarose gels. The gels are transferred using Southern blotting techniques onto nitrocellulose.

10 ng of each of the oligos are pooled and end-labeled with  $P^{32}$ . The nitrocellulose is prehybridized with blocking solution and hybridized with the labeled probes. Following hybridization and washing, the nitrocellulose filter is exposed to X-Omat AR X-ray film. The resulting hybridization pattern will be unique for each individual.

It is additionally contemplated within this example that the representative number of EST sequences can be varied for additional accuracy or clarity.

#### EXAMPLE 21

##### Identification of genes associated with hereditary diseases

This example illustrates an approach useful for the association of EST sequences with particular phenotypic characteristics. In this example, a particular EST is used as a test probe to associate that EST with a particular phenotypic characteristic.

An EST clone corresponding to EST01643, (SEQ ID NO 1894) maps to a gene rich region of chromosome 6. EST clone HHCMH89, from which EST01643 was derived, was mapped to chromosome 6p21 by Dr. Julie Korenberg of UCLA/Cedar Sinai Hospital using FISH. A search of Mendelian Inheritance in Man (supra) revealed 6p21 to be a very gene rich region containing several known genes and several diseases for which genes have not been identified. The cDNA encoded by EST clone HHCMH89 thus becomes an immediate candidate for each of these genetic diseases.

Cells from patients with these diseases are isolated and expanded in culture. PCR primers from the EST sequences are used to screen genomic DNA and RNA or cDNA from the patients. ESTs that are not amplified in the patients can be positively associated with a particular disease by further analysis.



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## EXAMPLE 22

Identification of a gene associated with  
Angelman's disease

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Angelman's disease (AD) is characterized by deletions on the long arm of chromosome 15 (15q11q13) (Williams et al. Am. J. Med. Genet. 32:339-345 (1989) hereby incorporated by reference). The symptoms of the disease include developmental delay, seizures, inappropriate laughter and ataxic movements. These symptoms suggest that the disorder is a neurologic deficiency. This prophetic example illustrates how ESTs, preferably obtained from a cDNA library from human brain, may be used in identifying the defective gene or genes associated with Angelman's Disease. (The example is based on analogous work with genomic DNA, rather than cDNA and ESTs, in identifying the genetic defect associated with Angelman's Disease.) This example also illustrates how EST sequences may generally be used for identifying gene sequences associated with an inherited disease that is mapped to a chromosome location.

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ESTs are screened using techniques described in Example 5 and Example 7 to identify those ESTs that localize to the long arm of chromosome 15 and preferably localize to chromosome 15 bands 15q11q13 from normal patients. ESTs that bind to the long arm of chromosome 15 are hybridized to chromosome 15 from AD patients. These studies are preferably performed using either fluorescence in situ hybridization or using somatic cell hybrids that contain fragments from the long arm of chromosome 15 from AD patients. Those chromosome 15-specific ESTs that do not map to chromosome 15 from AD patients are useful as markers for Angelman's Disease and can be incorporated into diagnostics for genetic screening. These ESTs are associated with chromosome deletions present in Angelman's disease. Identification of the gene associated with these AD negative ESTs and an analysis of the polypeptides encoded by the genes

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from normal patients is essential for providing gene or other therapies for AD patients.

Genetic diseases are not always accompanied by gene deletions. Therefore, it is also important to use the ESTs that bind to bands 15q11q13 from AD patients as tools to identify the polymorphisms present within the disease population. Restriction fragment length polymorphism (RFLP) analysis can be performed on patient cells from AD disease or from somatic cell hybrids created using the long arm of chromosome 15. For a review of RFLP techniques see Donis-Keller et al. (Cell 51:319-337 (1987) hereby incorporated by reference). DNA is isolated from the somatic cell lines or from cells from AD patients. The DNA is digested with one or more restriction enzymes according to techniques of Donis-Keller et al. The resulting fragments are separated by gel electrophoresis, denatured, transferred to nitrocellulose and hybridized with the selected radio-labeled ESTs that localize to the region of interest. The autoradiographic pattern is compared both to a number of AD patients and to normal patients. Common patterns of EST hybridization in AD patients that are not present in normal patients indicates that the genes associated with these ESTs are candidate genes affected by AD.

cDNA libraries are prepared from the somatic cell hybrids from AD patients. Libraries are prepared using Lambda Zap II Library Kits (Stratagene, La Jolla, California) or other commercially available library kits. The ESTs of interest are used as probes to identify those bacterial colonies carrying genes corresponding to the EST probes. Positive clones are sequenced and the sequences are compared to homologous gene sequences derived from normal patients.

Alterations, including deletions and substitutions, within gene sequences, associated with bands 15q11q13, are thus positively identified and associated with AD disease. Wagstaff et al. were able to identify deletions and substitutions in sequences encoding the GABA<sub>A</sub> receptor

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protein subunit from patients with Angelman's disease (Am. J. Hum. Genet. 49:330-337, (1991)). It is likely that other genes will additionally be associated with the disease.

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**EXAMPLE 23****Preparation and Use of Antisense Oligonucleotides**

10 Antisense RNA molecules are known to be useful for regulating translation within the cell. Antisense RNA molecules can be produced from EST sequences or from the corresponding gene sequences. These antisense molecules can be used as diagnostic probes to determine whether or not a particular gene is expressed in a cell. Similarly, the  
15 antisense molecules can be used as a therapeutic to regulate gene expression once the EST is associated with a particular disease (see Example 22).

The antisense molecules are obtained from a nucleotide sequence by reversing the orientation of the coding region with regard to the promoter. Thus, the antisense RNA is  
20 complementary to the corresponding mRNA. For a review of antisense design see Green et al., Ann. Rev. Biochem. 55:569-597 (1986), which is hereby incorporated by reference. The antisense sequences can contain modified sugar phosphate  
25 backbones to increase stability and make them less sensitive to RNase activity. Examples of the modifications are described by Rossi et al., Pharmacol. Ther. 50(2):245-254, (1991).

30 Antisense molecules are introduced into cells that express the gene corresponding to the EST of interest in culture. In a preferred application of this invention, the polypeptide encoded by the gene is first identified, so that the effectiveness of antisense inhibition on translation can be monitored using techniques that include but are not  
35 limited to antibody-mediated tests such as RIAs and ELISA, functional assays, or radiolabelling. The antisense molecule is introduced into the cells by diffusion or by transfection

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procedures known in the art. The molecules are introduced onto cell samples at a number of different concentrations preferably between  $1 \times 10^{-10} \text{M}$  to  $1 \times 10^{-4} \text{M}$ . Once the minimum concentration that can adequately control translation is identified, the optimized dose is translated into a dosage suitable for use in vivo. For example, an inhibiting concentration in culture of  $1 \times 10^{-7}$  translates into a dose of approximately 0.6 mg/kg bodyweight. Levels of oligonucleotide approaching 100 mg/kg bodyweight or higher may be possible after testing the toxicity of the oligonucleotide in laboratory animals.

The antisense can be introduced into the body as a bare or naked oligonucleotide, oligonucleotide encapsulated in lipid, oligonucleotide sequence encapsidated by viral protein, or as oligonucleotide contained in an expression vector such as those described in Example 25. The antisense oligonucleotide is preferably introduced into the vertebrate by injection. It is additionally contemplated that cells from the vertebrate are removed, treated with the antisense oligonucleotide, and reintroduced into the vertebrate. It is further contemplated that the antisense oligonucleotide sequence is incorporated into a ribozyme sequence to enable the antisense to bind and cleave its target. For technical applications of ribozyme and antisense oligonucleotides see Rossi et al.

#### EXAMPLE 24

##### Preparation and use of Triple Helix Probes

Triple helix oligonucleotides are used to inhibit transcription from a genome. They are particularly useful for studying alterations in cell activity as it is associated with a particular gene. The EST sequences or complete sequences of the present invention or, more preferably, a portion of those sequences, can be used to inhibit gene

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expression in individuals having diseases associated with a particular gene. Similarly, a portion of the EST or corresponding gene sequence can be used to study the effect of inhibiting transcription of a particular gene within a cell. Traditionally, homopurine sequences were considered the most useful. However, homopyrimidine sequences can also inhibit gene expression. Thus, both types of sequences from either the EST or from the gene corresponding to the EST are contemplated within the scope of this invention. Homopyrimidine oligonucleotides bind to the major groove at homopurine:homopyrimidine sequences. As an example, 10-mer to 20-mer homopyrimidine sequences from the ESTs can be used to inhibit expression from homopurine sequences. SEQ ID NOS such as 282, 888, 719, 670, 994, 240, 873 and 761 contain homopyrimidine 15-mers. Moreover the natural (beta) anomers of the oligonucleotide units can be replaced with alpha anomers to render the oligonucleotide more resistant to nucleases. Further, an intercalating agent such as ethidium bromide, or the like, can be attached to the 3' end of the alpha oligonucleotide to stabilize the triple helix. For information on the generation of oligonucleotides suitable for triple helix formation see Griffin et al. (Science 245:967-971 (1989), which is hereby incorporated by this reference).

The oligonucleotides may be prepared on an oligonucleotide synthesizer or they may be purchased commercially from a company specializing in custom oligonucleotide synthesis. The sequences are introduced into cells in culture using techniques known in the art that include but are not limited to calcium phosphate precipitation, DEAE-Dextran, electroporation, liposome-mediated transfection or native uptake. Treated cells are monitored for altered cell function. These cell functions are predicted based upon the homologies of the gene, corresponding to the EST from which the oligonucleotide was derived, with known genes sequences that have been associated

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with a particular function. The cell functions can also be predicted based on the presence of abnormal physiologies within cells derived from individuals with a particular inherited disease, particularly when the EST is associated with the disease using techniques described in Example 22.

### EXAMPLE 25

#### Gene expression from DNA Sequences Corresponding to ESTs

A gene sequence of the present invention coding for all or part of a human gene product is introduced into an expression vector using conventional technology. (Techniques to transfer cloned sequences into expression vectors that direct protein translation in mammalian, yeast, insect or bacterial expression systems are well known in the art.) Commercially available vectors and expression systems are available from a variety of suppliers including Stratagene (La Jolla, California), Promega (Madison, Wisconsin), and Invitrogen (San Diego, California). If desired, to enhance expression and facilitate proper protein folding, the codon context and codon pairing of the sequence may be optimized for the particular expression organism, as explained by Hatfield, et al., U.S. Patent No. 5,082,767, incorporated herein by this reference.

The following is provided as one exemplary method to generate polypeptide from cloned cDNA sequences. The cDNA from the EST of interest is sequenced to identify the methionine initiation codon for the gene and the poly A sequence. If the cDNA lacks a poly A sequence, this sequence can be added to the construct by, for example, splicing out the Poly A sequence from pSG5 (Stratagene) using BglI and SalI restriction endonuclease enzymes and incorporating it into the mammalian expression vector pXT1 (Stratagene). pXT1 contains the LTRs and a portion of the gag gene from Moloney Murine Leukemia Virus. The position of the LTRs in the construct allow efficient stable transfection. The vector

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includes the Herpes Simplex Thymidine Kinase promoter and the selectable neomycin gene. The cDNA is obtained by PCR from the bacterial vector using oligonucleotide primers complementary to the cDNA and containing restriction endonuclease sequences for Pst I incorporated into the 5' primer and BglII at the 5' end of the corresponding cDNA 3' primer, taking care to ensure that the cDNA is positioned inframe with the poly A sequence. The purified fragment obtained from the resulting PCR reaction is digested with PstI, blunt ended with an exonuclease, digested with Bgl II, purified and ligated to pXT1, now containing a poly A sequence and digested BglII.

The ligated product is transfected into mouse NIH 3T3 cells using Lipofectin (Life Technologies, Inc., Grand Island, New York) under conditions outlined in the product specification. Positive transfectants are selected after growing the transfected cells in 600ug/ml G418 (Sigma, St. Louis, Missouri). The protein is preferably released into the supernatant. However if the protein has membrane binding domains, the protein may additionally be retained within the cell or expression may be restricted to the cell surface.

Since it may be necessary to purify and locate the transfected product, synthetic 15-mer peptides synthesized from the predicted cDNA sequence are injected into mice to generate antibody to the polypeptide encoded by the cDNA.

If antibody production is not possible, the cDNA sequence is additionally incorporated into eukaryotic expression vectors and expressed as a chimeric with, for example,  $\beta$ -globin. Antibody to  $\beta$ -globin is used to purify the chimeric. Corresponding protease cleavage sites engineered between the  $\beta$ -globin gene and the cDNA are then used to separate the two polypeptide fragments from one another after translation. One useful expression vector for generating  $\beta$ -globin chimerics is pSG5 (Stratagene). This vector encodes rabbit  $\beta$ -globin. Intron II of the rabbit  $\beta$ -globin gene facilitates splicing of the expressed transcript,

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and the polyadenylation signal incorporated into the construct increases the level of expression. These techniques as described are well known to those skilled in the art of molecular biology. Standard methods are published in methods texts such as Davis et al. and many of the methods are available from the technical assistance representatives from Stratagene, Life Technologies, Inc., or Promega. Polypeptide may additionally be produced from either construct using in vitro translation systems such as In vitro Express™ Translation Kit (Stratagene).

### Example 26

#### Production of an Antibody to a Human Protein

Substantially pure protein or polypeptide is isolated from the transfected or transformed cells as described in Example 25. Concentration of protein in the final preparation is adjusted, for example, by concentration on an Amicon filter device, to the level of a few micrograms/ml. Monoclonal or polyclonal antibody to the protein can then be prepared as follows:

##### A. Monoclonal Antibody Production by Hybridoma Fusion

Monoclonal antibody to epitopes of any of the peptides identified and isolated as described can be prepared from murine hybridomas according to the classical method of Kohler, G. and Milstein, C., *Nature* 256:495 (1975) or derivative methods thereof. Briefly, a mouse is repetitively inoculated with a few micrograms of the selected protein over a period of a few weeks. The mouse is then sacrificed, and the antibody producing cells of the spleen isolated. The spleen cells are fused by means of polyethylene glycol with mouse myeloma cells, and the excess unfused cells destroyed by growth of the system on selective media comprising aminopterin (HAT media). The successfully fused cells are diluted and aliquots of the dilution placed in wells of a



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microtiter plate where growth of the culture is continued. Antibody-producing clones are identified by detection of antibody in the supernatant fluid of the wells by immunoassay procedures, such as Elisa, as originally described by Engvall, E., *Meth. Enzymol.* 70:419 (1980), and derivative methods thereof. Selected positive clones can be expanded and their monoclonal antibody product harvested for use. Detailed procedures for monoclonal antibody production are described in Davis, L. et al. *Basic Methods in Molecular Biology* Elsevier, New York. Section 21-2.

#### B. Polyclonal Antibody Production by Immunization

Polyclonal antiserum containing antibodies to heterogenous epitopes of a single protein can be prepared by immunizing suitable animals with the expressed protein described above, which can be unmodified or modified to enhance immunogenicity. Effective polyclonal antibody production is affected by many factors related both to the antigen and the host species. For example, small molecules tend to be less immunogenic than other and may require the use of carriers and adjuvant. Also, host animals vary in response to site of inoculations and dose, with both inadequate or excessive doses of antigen resulting in low titer antisera. Small doses (ng level) of antigen administered at multiple intradermal sites appears to be most reliable. An effective immunization protocol for rabbits can be found in Vaitukaitis, J. et al. *J. Clin. Endocrinol. Metab.* 33:988-991 (1971).

Booster injections can be given at regular intervals, and antiserum harvested when antibody titer thereof, as determined semi-quantitatively, for example, by double immunodiffusion in agar against known concentrations of the antigen, begins to fall. See, for example, Ouchterlony, O. et al., Chap. 19 in: *Handbook of Experimental Immunology* D. Wier (ed) Blackwell (1973). Plateau concentration of antibody is usually in the range of 0.1 to 0.2 mg/ml of serum (about 12  $\mu$ M). Affinity of the antisera for the antigen is

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determined by preparing competitive binding curves, as described, for example, by Fisher, D., Chap. 42 in: *Manual of Clinical Immunology*, 2d Ed. (Rose and Friedman, eds.) Amer. Soc. For Microbiol., Washington, D.C. (1980).

Antibody preparations prepared according to either protocol are useful in quantitative immunoassays which determine concentrations of antigen-bearing substances in biological samples; they are also used semi-quantitatively or qualitatively to identify the presence of antigen in a biological sample.

#### EXAMPLE 27

##### Identification of Tissue Types or Cell Species by Means of Labeled Tissue Specific Antibodies

Identification of specific tissues is accomplished by the visualization of tissue specific antigens by means of antibody preparations according to Example 26 which are conjugated, directly or indirectly to a detectable marker. Selected labeled antibody species bind to their specific antigen binding partner in tissue sections, cell suspensions, or in extracts of soluble proteins from a tissue sample to provide a pattern for qualitative or semi-qualitative interpretation.

Antisera for these procedures must have a potency exceeding that of the native preparation, and for that reason, antibodies are concentrated to a mg/ml level by isolation of the gamma globulin fraction, for example, by ion-exchange chromatography or by ammonium sulfate fractionation. Also, to provide the most specific antisera, unwanted antibodies, for example to common proteins, must be removed from the gamma globulin fraction, for example by means of insoluble immunoabsorbents, before the antibodies are labeled with the marker. Either monoclonal or heterologous antisera is suitable for either procedure.

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#### A. Immunohistochemical Techniques

Purified, high-titer antibodies, prepared as described above, are conjugated to a detectable marker, as described, for example, by Fudenberg, H., Chap. 26 in: **Basic & Clinical Immunology**, 3rd Ed. Lange, Los Altos, California (1980) or Rose, N. et al., Chap. 12 in: **Methods in Immunodiagnosis**, 2d Ed. John Wiley & Sons, New York (1980).

A fluorescent marker, either fluorescein or rhodamine, is preferred, but antibodies can also be labeled with an enzyme that supports a color producing reaction with a substrate, such as horseradish peroxidase. Markers can be added to tissue-bound antibody in a second step, as described below. Alternatively, the specific antitissue antibodies can be labeled with ferritin or other electron dense particles, and localization of the ferritin coupled antigen-antibody complexes achieved by means of an electron microscope. In yet another approach, the antibodies are radiolabeled, with, for example  $^{125}\text{I}$ , and detected by overlaying the antibody treated preparation with photographic emulsion.

Preparations to carry out the procedures can comprise monoclonal or polyclonal antibodies to a single gene copy or protein, identified as specific to a tissue type, for example, brain tissue, or antibody preparations to several antigenically distinct tissue specific antigens can be used in panels, independently or in mixtures, as required.

Tissue sections and cell suspensions are prepared for immunohistochemical examination according to common histological techniques. Multiple cryostat sections (about 4  $\mu\text{m}$ , unfixed) of the unknown tissue and known control, are mounted and each slide covered with different dilutions of the antibody preparation. Sections of known and unknown tissues should also be treated with preparations to provide a positive control, a negative control, for example, pre-immune sera, and a control for non-specific staining, for example, buffer.

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Treated sections are incubated in a humid chamber for 30 min at room temperature, rinsed, then washed in buffer for 30-45 min. Excess fluid is blotted away, and the marker developed.

5 If the tissue specific antibody was not labeled in the first incubation, it can be labeled at this time in a second antibody-antibody reaction, for example, by adding fluorescein- or enzyme-conjugated antibody against the immunoglobulin class of the antiserum-producing species, for  
10 example, fluorescein labeled antibody to mouse IgG. Such labeled sera are commercially available.

The antigen found in the tissues by the above procedure can be quantified by measuring the intensity of color or fluorescence on the tissue section, and calibrating that  
15 signal using appropriate standards.

**B. Identification of Tissue Specific Soluble Proteins**

The visualization of tissue specific proteins and identification of unknown tissues from that procedure is carried out using the labeled antibody reagents and detection  
20 strategy as described for immunohistochemistry; however the sample is prepared according to an electrophoretic technique to distribute the proteins extracted from the tissue in an orderly array on the basis of molecular weight for detection.

A tissue sample is homogenized using a Virtis apparatus; cell suspensions are disrupted by Dounce homogenization or osmotic lysis, using detergents in either case as required to  
25 disrupt cell membranes, as is the practice in the art. Insoluble cell components such as nuclei, microsomes, and membrane fragments are removed by ultracentrifugation, and the soluble protein-containing fraction concentrated if  
30 necessary and reserved for analysis.

A sample of the soluble protein solution is resolved into individual protein species by conventional SDS polyacrylamide electrophoresis as described, for example, by  
35 Davis, L. et al., Section 19-2 in: *Basic Methods in Molecular Biology* (P. Leder, ed), Elsevier, New York (1986), using a

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range of amounts of polyacrylamide in a set of gels to resolve the entire molecular weight range of proteins to be detected in the sample. A size marker is run in parallel for purposes of estimating molecular weights of the constituent proteins. Sample size for analysis is a convenient volume of from 5-50  $\mu$ l, and containing from about 1 to 100  $\mu$ g protein. An aliquot of each of the resolved proteins is transferred by blotting to a nitrocellulose filter paper, a process that maintains the pattern of resolution. Multiple copies are prepared. The procedure, known as Western Blot Analysis, is well described in Davis, L. et al., (above) Section 19-3. One set of nitrocellulose blots is stained with Coomassie Blue dye to visualize the entire set of proteins for comparison with the antibody bound proteins. The remaining nitrocellulose filters are then incubated with a solution of one or more specific antisera to tissue specific proteins prepared as described in Example 26. In this procedure, as in procedure A above, appropriate positive and negative sample and reagent controls are run.

In either procedure A or B, a detectable label can be attached to the primary tissue antigen-primary antibody complex according to various strategies and permutations thereof. In a straightforward approach, the primary specific antibody can be labeled; alternatively, the unlabeled complex can be bound by a labeled secondary anti-IgG antibody. In other approaches, either the primary or secondary antibody is conjugated to a biotin molecule, which can, in a subsequent step, bind an avidin conjugated marker. According to yet another strategy, enzyme labeled or radioactive protein A, which has the property of binding to any IgG, is bound in a final step to either the primary or secondary antibody.

The visualization of tissue specific antigen binding at levels above those seen in control tissues to one or more tissue specific antibodies, prepared from the gene sequences identified from EST sequences, can identify tissues of unknown origin, for example, forensic samples, or

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differentiated tumor tissue that has metastasized to foreign bodily sites.

The entire contents of all references cited above are hereby incorporated by reference.

5        While the present invention has been described in some detail for purposes of clarity and understanding, one skilled in the art will appreciate that various changes in form and detail can be made without departing from the true scope of the invention.

10

#### VII. Correlation of EST and Clone Identifiers

15        The EST sequences of the present invention are identified herein by SEQ ID NO, and are identified in the GenBank database by a different number, are identified in the inventors' lab (and upcoming publications) by EST number, and clones have been submitted to the American Type Culture Collection (Rockville, Maryland USA) under clone names. Table 12 cross references those different numbers for the ESTs from cDNA, SEQ ID NOS 1-2409.

20        Certain Sequence ID NOS are excluded from some claims based on their homology to known non-human sequences (See Table 2).

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Table 12. SEQ ID NO Cross References

SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone
1	EST00007	M61959	HFA01	64	EST00066	M62010	HCC13	128	EST00252	M62191	HCC57	179	EST00048	M61998	HCC08
2	EST00009	M61953	HFA05	65	EST00067	M62011	HCC18	129	EST00321	M62254	HCC60	180	EST00052	M61999	HCC16
3	EST00010	M61961	HFA07	66	EST00068	M62012	HCC21	130	EST00322	M62255	HCC61	181	EST00054	M62000	HCC35
4	EST00011	M61962	HFA08	67	EST00069	M62013	HCC22	131	EST00323	M62256	HCC62	182	EST00055	M62001	HCC52
5	EST00012	M61963	HFA10	68	EST00070	M62014	HCC27	132	EST00324	M62257	HCC63	183	EST00056	M62002	HCC53
6	EST00013	M61964	HFA11	69	EST00071	M62015	HCC29	133	EST00325	M62258	HCC64	184	EST00057	M62003	HCC55
7	EST00014	M61965	HFA12	70	EST00072	M62016	HCC31	134	EST00326	M62259	HCC65	185	EST00058	M62004	HCC59
8	EST00015	M61966	HFA20	71	EST00073	M62017	HCC33	135	EST00327	M62260	HCC66	186	EST00059	M62005	HCC61
9	EST00016	M61967	HFA23	72	EST00074	M62018	HCC37	136	EST00328	M62261	HCC67	187	EST00060	M62006	HCC04
10	EST00017	M61968	HFA36	73	EST00075	M62019	HCC40	137	EST00329	M62262	HCC68	188	EST00061	M62007	HCC05
11	EST00018	M61969	HFA51	74	EST00076	M62020	HCC42	138	EST00330	M62263	HCC69	189	EST00062	M62008	HCC07
12	EST00019	M61970	HFA55	75	EST00077	M62021	HCC44	139	EST00331	M62264	HCC70	190	EST00063	M62009	HCC09
13	EST00020	M61971	HFA66	76	EST00078	M62022	HCC46	140	EST00332	M62265	HCC71	191	EST00064	M62010	HCC10
14	EST00021	M61972	HFA69	77	EST00079	M62023	HCC47	141	EST00333	M62266	HCC72	192	EST00065	M62011	HCC11
15	EST00022	M61973	HFA77	78	EST00080	M62024	HCC49	142	EST00334	M62267	HCC73	193	EST00066	M62012	HCC12
16	EST00023	M61974	HFA84	79	EST00081	M62025	HCC50	143	EST00335	M62268	HCC74	194	EST00067	M62013	HCC13
17	EST00024	M61975	HFA86	80	EST00082	M62026	HCC51	144	EST00336	M62269	HCC75	195	EST00068	M62014	HCC14
18	EST00025	M61976	HFA87	81	EST00083	M62027	HCC52	145	EST00337	M62270	HCC76	196	EST00069	M62015	HCC15
19	EST00026	M61977	HFA89	82	EST00084	M62028	HCC53	146	EST00338	M62271	HCC77	197	EST00070	M62016	HCC16
20	EST00027	M61978	HFA90	83	EST00085	M62029	HCC54	147	EST00339	M62272	HCC78	198	EST00071	M62017	HCC17
21	EST00028	M61979	HCA05	84	EST00086	M62030	HCC55	148	EST00340	M62273	HCC79	199	EST00072	M62018	HCC18
22	EST00029	M61980	HCA08	85	EST00087	M62031	HCC56	149	EST00341	M62274	HCC80	200	EST00073	M62019	HCC19
23	EST00030	M61981	HCA09	86	EST00088	M62032	HCC57	150	EST00342	M62275	HCC81	201	EST00074	M62020	HCC20
24	EST00031	M61982	HCA10	87	EST00089	M62033	HCC58	151	EST00343	M62276	HCC82	202	EST00075	M62021	HCC21
25	EST00032	M61983	HCA11	88	EST00090	M62034	HCC59	152	EST00344	M62277	HCC83	203	EST00076	M62022	HCC22
26	EST00033	M61984	HCA12	89	EST00091	M62035	HCC60	153	EST00345	M62278	HCC84	204	EST00077	M62023	HCC23
27	EST00034	M61985	HCA13	90	EST00092	M62036	HCC61	154	EST00346	M62279	HCC85	205	EST00078	M62024	HCC24
28	EST00035	M61986	HCA14	91	EST00093	M62037	HCC62	155	EST00347	M62280	HCC86	206	EST00079	M62025	HCC25
29	EST00036	M61987	HCA15	92	EST00094	M62038	HCC63	156	EST00348	M62281	HCC87	207	EST00080	M62026	HCC26
30	EST00037	M61988	HCA16	93	EST00095	M62039	HCC64	157	EST00349	M62282	HCC88	208	EST00081	M62027	HCC27
31	EST00038	M61989	HCA17	94	EST00096	M62040	HCC65	158	EST00350	M62283	HCC89	209	EST00082	M62028	HCC28
32	EST00039	M61990	HCA18	95	EST00097	M62041	HCC66	159	EST00351	M62284	HCC90	210	EST00083	M62029	HCC29
33	EST00040	M61991	HCA19	96	EST00098	M62042	HCC67	160	EST00352	M62285	HCC91	211	EST00084	M62030	HCC30
34	EST00041	M61992	HCA20	97	EST00099	M62043	HCC68	161	EST00353	M62286	HCC92	212	EST00085	M62031	HCC31
35	EST00042	M61993	HCA21	98	EST00100	M62044	HCC69	162	EST00354	M62287	HCC93	213	EST00086	M62032	HCC32
36	EST00043	M61994	HCA22	99	EST00101	M62045	HCC70	163	EST00355	M62288	HCC94	214	EST00087	M62033	HCC33
37	EST00044	M61995	HCA23	100	EST00102	M62046	HCC71	164	EST00356	M62289	HCC95	215	EST00088	M62034	HCC34
38	EST00045	M61996	HCA24	101	EST00103	M62047	HCC72	165	EST00357	M62290	HCC96	216	EST00089	M62035	HCC35
39	EST00046	M61997	HCA25	102	EST00104	M62048	HCC73	166	EST00358	M62291	HCC97	217	EST00090	M62036	HCC36
40	EST00047	M61998	HCA26	103	EST00105	M62049	HCC74	167	EST00359	M62292	HCC98	218	EST00091	M62037	HCC37
41	EST00048	M61999	HCA27	104	EST00106	M62050	HCC75	168	EST00360	M62293	HCC99	219	EST00092	M62038	HCC38
42	EST00049	M62000	HCA28	105	EST00107	M62051	HCC76	169	EST00361	M62294	HCC00	220	EST00093	M62039	HCC39
43	EST00050	M62001	HCA29	106	EST00108	M62052	HCC77	170	EST00362	M62295	HCC01	221	EST00094	M62040	HCC40
44	EST00051	M62002	HCA30	107	EST00109	M62053	HCC78	171	EST00363	M62296	HCC02	222	EST00095	M62041	HCC41
45	EST00052	M62003	HCA31	108	EST00110	M62054	HCC79	172	EST00364	M62297	HCC03	223	EST00096	M62042	HCC42
46	EST00053	M62004	HCA32	109	EST00111	M62055	HCC80	173	EST00365	M62298	HCC04	224	EST00097	M62043	HCC43
47	EST00054	M62005	HCA33	110	EST00112	M62056	HCC81	174	EST00366	M62299	HCC05	225	EST00098	M62044	HCC44
48	EST00055	M62006	HCA34	111	EST00113	M62057	HCC82	175	EST00367	M62300	HCC06	226	EST00099	M62045	HCC45
49	EST00056	M62007	HCA35	112	EST00114	M62058	HCC83	176	EST00368	M62301	HCC07	227	EST00100	M62046	HCC46
50	EST00057	M62008	HCA36	113	EST00115	M62059	HCC84	177	EST00369	M62302	HCC08	228	EST00101	M62047	HCC47
51	EST00058	M62009	HCA37	114	EST00116	M62060	HCC85	178	EST00370	M62303	HCC09	229	EST00102	M62048	HCC48
52	EST00059	M62010	HCA38	115	EST00117	M62061	HCC86	179	EST00371	M62304	HCC10	230	EST00103	M62049	HCC49
53	EST00060	M62011	HCA39	116	EST00118	M62062	HCC87	180	EST00372	M62305	HCC11	231	EST00104	M62050	HCC50
54	EST00061	M62012	HCA40	117	EST00119	M62063	HCC88	181	EST00373	M62306	HCC12	232	EST00105	M62051	HCC51
55	EST00062	M62013	HCA41	118	EST00120	M62064	HCC89	182	EST00374	M62307	HCC13	233	EST00106	M62052	HCC52
56	EST00063	M62014	HCA42	119	EST00121	M62065	HCC90	183	EST00375	M62308	HCC14	234	EST00107	M62053	HCC53
57	EST00064	M62015	HCA43	120	EST00122	M62066	HCC91	184	EST00376	M62309	HCC15	235	EST00108	M62054	HCC54
58	EST00065	M62016	HCA44	121	EST00123	M62067	HCC92	185	EST00377	M62310	HCC16	236	EST00109	M62055	HCC55
59	EST00066	M62017	HCA45	122	EST00124	M62068	HCC93	186	EST00378	M62311	HCC17	237	EST00110	M62056	HCC56
60	EST00067	M62018	HCA46	123	EST00125	M62069	HCC94	187	EST00379	M62312	HCC18	238	EST00111	M62057	HCC57
61	EST00068	M62019	HCA47	124	EST00126	M62070	HCC95	188	EST00380	M62313	HCC19	239	EST00112	M62058	HCC58
62	EST00069	M62020	HCA48	125	EST00127	M62071	HCC96	189	EST00381	M62314	HCC20	240	EST00113	M62059	HCC59
63	EST00070	M62021	HCA49	126	EST00128	M62072	HCC97	190	EST00382	M62315	HCC21	241	EST00114	M62060	HCC60
					EST00129	M62073	HCC98		EST00383	M62316	HCC22		EST00115	M62061	HCC61
					EST00130	M62074	HCC99		EST00384	M62317	HCC23		EST00116	M62062	HCC62
					EST00131	M62075	HCC00		EST00385	M62318	HCC24		EST00117	M62063	HCC63
					EST00132	M62076	HCC01		EST00386	M62319	HCC25		EST00118	M62064	HCC64
					EST00133	M62077	HCC02		EST00387	M62320	HCC26		EST00119	M62065	HCC65
					EST00134	M62078	HCC03		EST00388	M62321	HCC27		EST00120	M62066	HCC66
					EST00135	M62079	HCC04		EST00389	M62322	HCC28		EST00121	M62067	HCC67
					EST00136	M62080	HCC05		EST00390	M62323	HCC29		EST00122	M62068	HCC68
					EST00137	M62081	HCC06		EST00391	M62324	HCC30		EST00123	M62069	HCC69
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					EST00142	M62086	HCC11		EST00396	M62329	HCC35		EST00128	M62074	HCC74
					EST00143	M62087	HCC12		EST00397	M62330	HCC36		EST00129	M62075	HCC75
					EST00144	M62088	HCC13		EST00398	M62331	HCC37		EST00130	M62076	HCC76
					EST00145	M62089	HCC14		EST00399	M62332	HCC38		EST00131	M62077	HCC77
					EST00146	M62090	HCC15		EST00400	M62333	HCC39		EST00132	M62078	HCC78
					EST00147	M62091	HCC16		EST00401	M62334	HCC40		EST00133	M62079	HCC79
					EST00148	M62092	HCC17		EST00402	M62335	HCC41		EST00134	M62080	HCC80
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183	EST001148	M62089	HHC161	250	EST000197	M62136	HHC5A87	318	EST000380	M78232	HEFBA04
184	EST001149	M62090	HHC162	251	EST000370	M62296	HHC5A92	319	EST000381	M78233	HEFBA07
185	EST001150	M62091	HHC173	252	EST000198	M62137	HHC5A95	320	EST000382	M78234	HEFBA07
186	EST001151	M62092	HHC175	253	EST000199	M62138	HHC5B05	321	EST000383	M78235	HEFBA09
187	EST001152	M62093	HHC179	254	EST000200	M62139	HHC5B07	322	EST000384	M78236	HEFBA10
188	EST000250	M62195	HHC184	255	EST000201	M62140	HHC5B08	323	EST000385	M78237	HEFBA11
189	EST000282	M62196	HHC185	256	EST000202	M62141	HHC5B09	324	EST000386	M78238	HEFBA11
190	EST000153	M62094	HHC186	257	EST000337	M62268	HHC5B12	325	EST000387	M78239	HEFBA13
191	EST000154	M62095	HHC188	258	EST000346	M62269	HHC5B19	326	EST000388	M78240	HEFBA18
192	EST000155	M62096	HHC190	259	EST000202	M62141	HHC5B19	327	EST000389	M78241	HEFBA18
193	EST000156	M62097	HHC192	260	EST000357	M62285	HHC5B20	328	EST000390	M78242	HEFBA21
194	EST000157	M62098	HHC193	261	EST000358	M62286	HHC5B21	329	EST000391	M78243	HEFBA23
195	EST000158	M62099	HHC194	262	EST000339	M62270	HHC5B22	330	EST000392	M78244	HEFBA23
196	EST000159	M62100	HHC205	263	EST000203	M62142	HHC5B25	331	EST000393	M78245	HEFBA23
197	EST000160	M62101	HHC207	264	EST000204	M62143	HHC5B25	332	EST000394	M78246	HEFBA23
198	EST000161	M62102	HHC209	265	EST000205	M62144	HHC5B27	333	EST000395	M78247	HEFBA23
199	EST000162	M62103	HHC211	266	EST000206	M62145	HHC5B29	334	EST000396	M78248	HEFBA23
200	EST000163	M62104	HHC213	267	EST000207	M62146	HHC5B30	335	EST000397	M78249	HEFBA23
201	EST000164	M62105	HHC217	268	EST000208	M62147	HHC5B31	336	EST000398	M78250	HEFBA23
202	EST000165	M62106	HHC219	269	EST000209	M62148	HHC5B32	337	EST000399	M78251	HEFBA23
203	EST000166	M62107	HHC220	270	EST000210	M62149	HHC5B33	338	EST000400	M78252	HEFBA23
204	EST000167	M62108	HHC221	271	EST000211	M62150	HHC5B34	339	EST000401	M78253	HEFBA23
205	EST000168	M62109	HHC222	272	EST000212	M62151	HHC5B35	340	EST000402	M78254	HEFBA23
206	EST000169	M62110	HHC223	273	EST000213	M62152	HHC5B36	341	EST000403	M78255	HEFBA23
207	EST000170	M62111	HHC224	274	EST000214	M62153	HHC5B37	342	EST000404	M78256	HEFBA23
208	EST000171	M62112	HHC225	275	EST000215	M62154	HHC5B38	343	EST000405	M78257	HEFBA23
209	EST000172	M62113	HHC226	276	EST000216	M62155	HHC5B39	344	EST000406	M78258	HEFBA23
210	EST000173	M62114	HHC227	277	EST000217	M62156	HHC5B40	345	EST000407	M78259	HEFBA23
211	EST000174	M62115	HHC228	278	EST000218	M62157	HHC5B41	346	EST000408	M78260	HEFBA23
212	EST000175	M62116	HHC229	279	EST000219	M62158	HHC5B42	347	EST000409	M78261	HEFBA23
213	EST000176	M62117	HHC230	280	EST000220	M62159	HHC5B43	348	EST000410	M78262	HEFBA23
214	EST000177	M62118	HHC231	281	EST000221	M62160	HHC5B44	349	EST000411	M78263	HEFBA23
215	EST000178	M62119	HHC232	282	EST000222	M62161	HHC5B45	350	EST000412	M78264	HEFBA23
216	EST000179	M62120	HHC233	283	EST000223	M62162	HHC5B46	351	EST000413	M78265	HEFBA23
217	EST000180	M62121	HHC234	284	EST000224	M62163	HHC5B47	352	EST000414	M78266	HEFBA23
218	EST000181	M62122	HHC235	285	EST000225	M62164	HHC5B48	353	EST000415	M78267	HEFBA23
219	EST000182	M62123	HHC236	286	EST000226	M62165	HHC5B49	354	EST000416	M78268	HEFBA23
220	EST000183	M62124	HHC237	287	EST000227	M62166	HHC5B50	355	EST000417	M78269	HEFBA23
221	EST000184	M62125	HHC238	288	EST000228	M62167	HHC5B51	356	EST000418	M78270	HEFBA23
222	EST000185	M62126	HHC239	289	EST000229	M62168	HHC5B52	357	EST000419	M78271	HEFBA23
223	EST000186	M62127	HHC240	290	EST000230	M62169	HHC5B53	358	EST000420	M78272	HEFBA23
224	EST000187	M62128	HHC241	291	EST000231	M62170	HHC5B54	359	EST000421	M78273	HEFBA23
225	EST000188	M62129	HHC242	292	EST000232	M62171	HHC5B55	360	EST000422	M78274	HEFBA23
226	EST000189	M62130	HHC243	293	EST000233	M62172	HHC5B56	361	EST000423	M78275	HEFBA23
227	EST000190	M62131	HHC244	294	EST000234	M62173	HHC5B57	362	EST000424	M78276	HEFBA23
228	EST000191	M62132	HHC245	295	EST000235	M62174	HHC5B58	363	EST000425	M78277	HEFBA23
229	EST000192	M62133	HHC246	296	EST000236	M62175	HHC5B59	364	EST000426	M78278	HEFBA23
230	EST000193	M62134	HHC247	297	EST000237	M62176	HHC5B60	365	EST000427	M78279	HEFBA23
231	EST000194	M62135	HHC248	298	EST000238	M62177	HHC5B61	366	EST000428	M78280	HEFBA23
232	EST000195	M62136	HHC249	299	EST000239	M62178	HHC5B62	367	EST000429	M78281	HEFBA23
233	EST000196	M62137	HHC250	300	EST000240	M62179	HHC5B63	368	EST000430	M78282	HEFBA23
234	EST000197	M62138	HHC251	301	EST000241	M62180	HHC5B64	369	EST000431	M78283	HEFBA23
235	EST000198	M62139	HHC252	302	EST000242	M62181	HHC5B65	370	EST000432	M78284	HEFBA23
236	EST000199	M62140	HHC253	303	EST000243	M62182	HHC5B66	371	EST000433	M78285	HEFBA23
237	EST000200	M62141	HHC254	304	EST000244	M62183	HHC5B67	372	EST000434	M78286	HEFBA23
238	EST000201	M62142	HHC255	305	EST000245	M62184	HHC5B68	373	EST000435	M78287	HEFBA23
239	EST000202	M62143	HHC256	306	EST000246	M62185	HHC5B69	374	EST000436	M78288	HEFBA23
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241	EST000204	M62145	HHC258	308	EST000248	M62187	HHC5B71	376	EST000438	M78290	HEFBA23
242	EST000205	M62146	HHC259	309	EST000249	M62188	HHC5B72	377	EST000439	M78291	HEFBA23
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244	EST000207	M62148	HHC261	311	EST000251	M62190	HHC5B74	379	EST000441	M78293	HEFBA23
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247	EST000210	M62151	HHC264	314	EST000254	M62193	HHC5B77	382	EST000444	M78296	HEFBA23
248	EST000211	M62152	HHC265	315	EST000255	M62194	HHC5B78	383	EST000445	M78297	HEFBA23
				316	EST000256	M62195	HHC5B79				

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SEQ ID	EST #	GB#	Clone	SEQ ID	EST #	GB#	Clone	SEQ ID	EST #	GB#	Clone	SEQ ID	EST #	GB#	Clone
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754	EST00722	W78574	HFBC69	820	EST01860	M85346	HFBCG02	932	EST01935	M85420	HFBCN92	941	EST01945	M85429	HFBC108
755	EST00723	W78575	HFBC72	821	EST01862	M85348	HFBCG09	933	EST01936	M85421	HFBCN93				
756	EST01541	W77957	HFBC73	822	EST01863	M85349	HFBCG10	934	EST01937	M85422	HFBCN94				
757	EST01542	W77958	HFBC74	823	EST01864	M85350	HFBCG11	935	EST01938	M85423	HFBCN95				
758	EST00724	W78576	HFBC77	824	EST01865	M85351	HFBCG12	936	EST01939	M85424	HFBCN96				
759	EST00725	W78577	HFBC78	825	EST01866	M85352	HFBCG13	937	EST01940	M85425	HFBCN97				
760	EST00726	W78578	HFBC80	826	EST01867	M85353	HFBCG15	938	EST01941	M85426	HFBCN98				
761	EST01544	W77960	HFBC82	827	EST01868	M85354	HFBCG17	939	EST01942	M85427	HFBCN99				
762	EST00727	W78579	HFBC83	828	EST01869	M85355	HFBCG19	940	EST01943	M85428	HFBCN99				
763	EST00728	W78580	HFBC84	829	EST01870	M85356	HFBCG20	941	EST01944	M85429	HFBCN99				
764	EST00729	W78581	HFBC85	830	EST01871	M85357	HFBCG21								
765	EST00730	W78582	HFBC86	831	EST01872	M85358	HFBCG22								
766	EST00731	W78583	HFBC87	832	EST01873	M85359	HFBCG23								
767	EST00732	W78584	HFBC88	833	EST01874	M85360	HFBCG24								
768	EST00733	W78585	HFBC90	834	EST01875	M85361	HFBCG25								
769	EST00734	W78586	HFBC91	835	EST01876	M85362	HFBCG26								
770	EST00735	W78587	HFBC93	836	EST01877	M85363	HFBCG27								
771	EST01546	W77962	HFBC94	837	EST01878	M85364	HFBCG29								
772	EST00736	W78588	HFBC95	838	EST01879	M85365	HFBCG30								
773	EST01547	W77963	HFBC96	839	EST01880	M85366	HFBCG31								
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775	EST00737	W78589	HFBCF03	841	EST01882	M85368	HFBCG33								
776	EST00738	W78590	HFBCF07	842	EST01883	M85369	HFBCG34								
777	EST00739	W78591	HFBCF09	843	EST01884	M85370	HFBCG35								
778	EST00740	W78592	HFBCF10	844	EST01885	M85371	HFBCG37								
779	EST00741	W78593	HFBCF11	845	EST01886	M85372	HFBCG38								
780	EST01549	W77965	HFBCF14	846	EST01887	M85373	HFBCG40								
781	EST01550	W77966	HFBCF16	847	EST01888	M85374	HFBCG43								
782	EST01551	W77967	HFBCF16	848	EST01889	M85375	HFBCG44								
783	EST01552	W77968	HFBCF23	849	EST01890	M85376	HFBCG45								
784	EST01852	M85338	HFBCF41	850	EST01891	M85377	HFBCG47								
785	EST01553	W77969	HFBCF42	851	EST01892	M85378	HFBCG49								
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787	EST00743	W78595	HFBCF44	853	EST01894	M85380	HFBCG53								
788	EST00744	W78596	HFBCF45	854	EST01895	M85381	HFBCG57								
789	EST00745	W78597	HFBCF46	855	EST01896	M85382	HFBCG61								
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796	EST00750	W78602	HFBCF53	862	EST01903	M85389	HFBCG77								
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798	EST00751	W78603	HFBCF56	864	EST01905	M85391	HFBCG79								
799	EST00752	W78604	HFBCF57	865	EST01906	M85392	HFBCG80								
800	EST00753	W78605	HFBCF58	866	EST01907	M85393	HFBCG81								
801	EST00754	W78606	HFBCF60	867	EST01908	M85394	HFBCG83								
802	EST00755	W78607	HFBCF61	868	EST01909	M85395	HFBCG84								
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809	EST00762	W78614	HFBCF81	875	EST01916	M85402	HFBCG94								
810	EST00763	W78615	HFBCF84	876	EST01917	M85403	HFBCG96								
811	EST00764	W78616	HFBCF85	877	EST01918	M85404	HFBCG99								
812	EST01854	M85340	HFBCF86	878	EST01919	M85405	HFBCG99								
813	EST00765	W78617	HFBCF87	879	EST01920	M85406	HFBCG99								
814	EST00766	W78618	HFBCF89	880	EST01921	M85407	HFBCG99								
815	EST01855	M85341	HFBCF90	881	EST01922	M85408	HFBCG99								
816	EST01856	M85342	HFBCF91	882	EST01923	M85409	HFBCG99								
817	EST01857	M85343	HFBCF93	883	EST01924	M85410	HFBCG99								
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SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone
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1132	EST02152	M85635	HFBC18	1253	EST102282	M85761	HFBCN25
1133	EST02153	M85636	HFBC120	1254	EST102283	M85762	HFBCN29
1134	EST02154	M85637	HFBC122	1255	EST102284	M85763	HFBCN31
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1154	EST02176	M85659	HFBC154	1275	EST102304	M85783	HFBCN61
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1158	EST02181	M85663	HFBC168	1279	EST102308	M85787	HFBCN66
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1885	EST01004	M78855	HHCMI61	1951	EST01056	M78908	HHCPC10	2017	EST01111	M78963	HHCPE85
1886	EST01005	M78856	HHCMI72	1952	EST01057	M78909	HHCPC11	2018	EST01112	M78964	HHCPE89
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2263	EST01308	M79159	HHCPI63	2330	EST01793	M78200	HHCPI13
2264	EST01309	M79160	HHCPI64	2331	EST01356	M79208	HHCPI16
2265	EST01310	M79161	HHCPI65	2332	EST01794	M78201	HHCPI22
2266	EST01311	M79162	HHCPI66	2333	EST01357	M78209	HHCPI23
2267	EST01312	M79163	HHCPI67	2334	EST01358	M79209	HHCPI23
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2273	EST01318	M79169	HHCPI01	2340	EST01363	M79216	HHCPI23
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2298	EST01343	M79194	HHCPI41	2365	EST01385	M79240	HHCPI23
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2325	EST01370	M79221	HHCPI68				

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NOTE REGARDING SEQUENCE LISTINGS: The listings of SEQ ID NOS: 1-2421 are in numerical order. However, an occasional number (for example, SEQ ID NO: 44) is not found in this list. In all, 9 SEQ ID NOS are not used. Nevertheless, the convention "1-2421" is used, for example, to refer to all the SEQ ID NOS in the following list, while "1-315" is used, for example, to refer to all the listed sequences falling between SEQ ID NO 1 and SEQ ID NO 315.

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## SEQUENCE LISTING

## (1) GENERAL INFORMATION:

- (i) APPLICANT: Venter, J. Craig  
Adams, Mark D.  
Moreno, Ruben F.
- (ii) TITLE OF INVENTION: Sequences Characteristic of Human Gene  
Transcription Product
- (iii) NUMBER OF SEQUENCES: 2412 (1-2421, with 9 SEQ ID NOS unused.)
- (iv) CORRESPONDENCE ADDRESS:
  - (A) ADDRESSEE: Knobbe, Martens, Olson, and Bear
  - (B) STREET: 620 Newport Center Dr. Sixteenth Floor
  - (C) CITY: Newport Beach
  - (D) STATE: CA
  - (E) COUNTRY: USA
  - (F) ZIP: 92660
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Floppy disk
  - (B) COMPUTER: IBM PC compatible
  - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
  - (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER: 07/837,195
  - (B) FILING DATE: 12-FEB-1992
- (vii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: US 07/716,831
  - (B) FILING DATE: 20-JUN-1991
- (viii) ATTORNEY/AGENT INFORMATION:
  - (A) NAME: Israelsen, Ned A.
  - (B) REGISTRATION NUMBER: 29,655
  - (C) REFERENCE/DOCKET NUMBER: NIH004.004CP1
- (ix) TELECOMMUNICATION INFORMATION:
  - (A) TELEPHONE: 619-235-8550
  - (B) TELEFAX: 619-235-0176

SEQ ID NO:1: (Length of Sequence = 362 Nucleotides)

CTTCCCTTTT GTTCCCTCA GTGTCCCTTT TAATGCTTC CCTCCATTTT CCTTAGCAGC ATCCTAGTTG ATGGTCTGGG  
TTATCAGAGG AGCAAAAACA TTTAAGTGTC AAATAATGCT CATGTGCTCC CTGGGATTTC TAAACAGAAA AAATGAAGAA

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AGAGGCAGAG AAGAGCTTCA CAAGGTGTGT GCCAGCTCTG CATCATTTCC AGCTGCTCAA CCACCATTTT TCCCATTTTA  
GGTCCCCAAA AGTAGGAGGT GGGGCTCAC AGAGCTGCTG TGGGCTTTGG GTATCAAAG CTGCAGCCAC CATATGGGGC  
ACTCTGGCT GGTGTACAGG GTGGGCATTG CCCAGTCTT TT

SEQ ID NO:2: (Length of Sequence = 214 Nucleotides)

GTTTINCITT TTCTTAGCT TCATTTCTCT TAAAAACAA GGAACAAGAA AACATTGCAC CAGCGTTCTA AGCCTCAAAC  
AAAANACAAA ACAATCCCC CTGCGAAGAA CAATAAATT TACATCTCTT TGGCAACAAT AACTTAAAT CACCCAATT  
CCATTCGCTC CAACCACAGC AGTTAGTTAG TTACAAAAT ATTCCNTGTG CTGC

SEQ ID NO:3: (Length of Sequence = 344 Nucleotides)

ATTAATAGGA AAGATGATTG TATAGATGGT GGGCTATTAA CTCAGATCAG GATGAGAATC GGGAGTGCCT TTACATGTGT  
GGTACCCAAA TGGGTGGTTG GATATAAGAG TAACAAAAGG ACTGAAAGGG TTAAAAAGA AAGAAAAAA AAAAATCCCC  
TGGTTGGGAG GGIGTTAAGT ATCGAGTGT TTCCAAACC ATTCCTCTC TGCTCACCTA CCCCTAGGTG ATTAAAGGAG  
ATAACTTTTA AAAAAGAAAG AATTGGCTCA AAGGTACTGT AAATTCTAGG ATTATATACC TTTATATAGG TTCATTCCTT  
GATCCCTGTA TTATCAAGGC ACAG

SEQ ID NO:4: (Length of Sequence = 352 Nucleotides)

GACCCGGTAA CCGAGGCGGC AAGGAGGCCA GGTAGTCCCG GCACCTCTCA CTCTGCAGAG ACCAGCGGCT TCGTGGGAGG  
CCTGTGGGTC ACACGTAGGG GCTAGAGCCA GCCTGCATCC TGCCACCGG GCTCCACTTG GAGATCAGCA GGAGGGCCAG  
TGTGGGACCC CTGCTGCCAC CTCTCTGGG CTGTCTCTT TCTGGAAT TAAGAAGGTG TGCTCCAGAG CCAAGAGGAG  
CAATAAGAAA CCTCGTGTGC CAGCTTCTTA AGGGTGCAG TGCAAGACCC CA

SEQ ID NO:5: (Length of Sequence = 562 Nucleotides)

ATACCCCTAC ATATATATTC ACAGAAAATC ATATTGCATA TACTCTTTCT CCACATCATA AAAATGGGTG TTGGGCTCTC  
TAGGACACAA GGAAGCAGG CCAAATTTCT CATATTTTCA GGAATAAAT GAGTGCCCG AAGGTGTAAT AGGAACCTTT  
TACTAACCTC ATCTGACTTC ATCTCACAC CAGCAATTTG TGTGTAAGGA AACTGGCCGA GAGTGGTTAA GAAATATATC  
CAAAGACGTA TAGTTCCAAA TGGAAACCGG ATCTTTTAT TTAATTTCCA ATCATCTTTC CATTATATCA GCCAATGATG  
GAGCAGAAAG CTGGTCCAGG CAATCCAGA ATAGATCTTT CTAGGCACCC GTTCAGTGTG AGGAGGGGGA AGTGGCCTTG  
CCAAGGGGCC AGTGAGCTCA ATTAGGGTTA ACGCTGCTTC TTAGCCTACC CCAGGGGNCA CCGCACTTAG GTTGTTTTGT  
GCCAGCTTT GGCAGGAAGC ATTCTCTCTT TCAAAGATTN NAGCCTTGGG GTCATATATC GGGTGTAAATA GGGTCTTTT  
TT

SEQ ID NO:6: (Length of Sequence = 359 Nucleotides)

ACATGTTCTC CCTCTTTCAA TTTTAGCAGT AATGTGATCC TCAAAAATGC ATTAACTACTA GTTGAAGTAA ATAAACGGAA  
GAGCTCCAAA ATGCCTGCAT TAAATGCATT TTTCCACACT AATGCCAATC ATCCAAAGCT ATTTTCAACA AGTCAGGTAT  
TCAAAGCTAT TCACACCACT TGAAAGAGTA ATTACCATTT ACTGAAGCAC TTATCTGTCC TACACTGATG GGAGTAAATG  
CTTCTCATAG GTTATCTCAT GTACATTATG CCACCTTAC TTAATATGAT CACAATTNAG TGCTATAGGT TTTTGGGTTA  
ATGTTTTCCC NGGGGGAGTT GTTAAAAACA TGGCATTTT

SEQ ID NO:7: (Length of Sequence = 218 Nucleotides)

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AACTTGCAAC ATAAATACTA GAAAAAGAGA AAATATCATC AAAATACAAA TAACTGTTAG AAATCATTGC TCAAAGAAR  
 AACCTGGCAA TGCATGATTA CGAAATGCAA AAGAMGATAC AGTTGCTCTC TGTATATGCG CTTTCCACAT CCACAGATTC  
 AAACAACGTG GGATAAAAAA GGATTTTTCA ATGCCATTAA ACAVCAATGC AACAGTAA

SEQ ID NO:8: (Length of Sequence = 345 Nucleotides)

CTACAATAGA AGGCAAACCTA TGTCCCTCCT TTGCTCAGAA ACTTTTAATA TCTKCTATT TCCCCATGTA AAAGCCAATC  
 CTCAACCACA GTGTAGAAGG GCTATCCATT TCTAGCTACA CATCTCCTCA GTCACTGCCC CCAGCCCCAG TACTTGGGGA  
 CTTTGCCCTT GCAGTCCCT GTGCCAGCAA ACTCTTCTC CAGATGTCCA CATGACTCAC CCNCTCCTT CAGGGGTCTT  
 CTCAAATGTC ACTTTACCAG AGGTGGCTTC CCTGACCATC CTGTATAAAT AGCATCACC TACCTCCTAT CTCCTCTCT  
 AATGTCTCAG GAATTGATA TCAAG

SEQ ID NO:9: (Length of Sequence = 189 Nucleotides)

GTGAACAGAC TAAGGCCTTT NTGGAGGCC AGAATAAGAT TACTGTGCCA TTCTTGAGC AGTGTCCCAT CAGAGGTTTA  
 TACAAAGAGA GAATGACTGA ACTATATGAT TATCCANGT ATAGTTGCCA CTCAAGAAA GGAGAACGGT GTTTTATTT  
 TTACAATACA GGNTTTAVGA ACCACCGG

SEQ ID NO:10: (Length of Sequence = 267 Nucleotides)

CTCCCTTCGC CACCTGCTGG ACGGAGGGG CTACTACGAT GCCATGGGTG TCTGRTTTT TTATTTCTCA GACAGGACTG  
 CTCTGTAINT GTCTTTGGAT TCTACGTAGA TTTATATTTG TAAATATTA CATTTGTCAT GACCAGAAGA AATGTCATTA  
 TCGTAAATTT TAGATTCTGG NGTCTATATA TGAAGNAAT ACTAATACT AACTGTTATA ACAWCAAAT GTGGGNTGTA  
 TATCTACARG CCGAGCCGA CTGTCA

SEQ ID NO:11: (Length of Sequence = 247 Nucleotides)

CTCATAAAGC CAGGGTGATA AAATGGTAG TTTCATGTTA TCTACAAGRC TAAGKTCAA ATTCCATGCA TGTGCTGRTA  
 AAAGACCCAT NATGGKCTM ACTGTACTTA CTCGCCATTT ATTAGCATC ATTCTGGTCA CCAGCTCTAG TTCTCTGCT  
 TAGCGAATCT CGCTGTCTT CAAGATGTCA TTCAAATGTC ACATTTTGTG GGAAGCCTTG CCTTTTTTGA CACGGTCTCC  
 CTGCCAC

SEQ ID NO:12: (Length of Sequence = 280 Nucleotides)

AAGGCGAGAG GCTTCTGGAG AAACCCACCC CACCAACGTC TTGATCTTGG ACTTTTAVCC TCCAGAGCTA TGAGAAAACA  
 AVTTTCTGTV VATVGVGGCC ACTCAGCCTG TGGATACTGG CAGCCCTAGC AAACATAC ACACATACAT TTAAACTCG  
 GTTAAATCCT GTERCCATTC ACTTATGGTT CAGTTTTTAA ATAGTCCTAG TCTTATGVCC ACTGTTAAAG TTCACCAGGA  
 CATAGGSCAT TGGGGAAAGG GGCTGTAACT TCTTGGATTA

SEQ ID NO:13: (Length of Sequence = 339 Nucleotides)

VCTVCTVCC AACTTCATTC AGATATTGAC TCTGGTGATG GGAACATTAA ATACATTCTC TCAGGGGAAG GAGCTGGAAC  
 CATTTTTVTR ATTGATGACA AATCAGGGAA CATTATGCC ACCAAGACGT TGGATCGAGA AGAGAGAGCC CAGTACACGT  
 TGATGGCTCA GCGGTGGAC AGGGACACCA ATCGGCCACT GGAGCCACCG TCGGAATTCA TTKTCAAGGK CCAGGACATT  
 AATGACAGTC CTCGGAGGT TTCTGCACG AGACCTATCA TGCCAACGTG GCCSTGTARA GGTCCAATKT TGGGTGSTGT  
 ACGGTAGTGG GGAGGCCTG

SEQ ID NO:14: (Length of Sequence = 342 Nucleotides)

114

GGGVGCAAAG TAGCAGATTC TAGTAAAGGA CCAGATGAGG CAAAAATTAA GGCACCTCTTG GAAAGAACAG GCTACACACT  
 TGATGTGACC ACTGGACAGA GGAAGTATGG AGGACCACCT CCAGATTCCG TTTATVCAGG TCAGCAGCCT TCTGTTGGCA  
 CTGAGATATT TGTGGGAAAG ATCCCAAGAG ATCTATTTTG AGGATGAAT TGTTCATTA TTTGAGAAAG CTGAGACCTA  
 TATGGGATCC TTCGTCTAAT GATGGATCCA CTCACTGGTC TCAATAGAGG TTAATGCGTT TGTCACITTTT TTGTACAAAA  
 GGAGCARGCT CAAGGAGGGC TG

SEQ ID NO:15: (Length of Sequence = 354 Nucleotides)

ATGTTGATGC TGAAATTVAA GATCCACCAA TTCCAGAAAA ACCATGGAAG GTTCATGTGA AATGGATTTT GGACACTGAT  
 ATTTTCAATG AATGGATGAA TGAGGAGGAT TATRAGGTGG ATGAAAATAG GAAGCCTGTR AGTTTYCGTC AGCGGATTTT  
 AACCAGAAT GAAGAGCCAG TCAGAAGTCC AGAAAGAAGA GATAGAAAAG CATCASCTAA TGCTCGAAAG AGGAAACATT  
 CGCCTTCGCC TCCCCCTCCG ACACCAACAG AWTACGGGA AGAAGAGTGG GAAGAAAGGC CAAGCTAGCC TTTTATGGGG  
 AAGCGCAAG AAGTCCAGAA AGAGGGWGG TTGA

SEQ ID NO:16: (Length of Sequence = 348 Nucleotides)

CAGGCAAGTT TCTTCCAGGA TGAGAAATCA GTGGAAAGTG AGGGCCAGCC AACAGCCACC ACCAACCACC CAACACGCGA  
 GCGAGACCAT CTTAAAGAG CCCAGCCAA GCTGACCATG GGTCTGACCC CAACTGAAG AAATGCCAG CCCAGCCAAA  
 CCCAAATTGC TAACCTGTAT TATAAGCAAG TACAATGGTC CTTACCTTAA GCCACTAAGT TTTGGGATGC TTTGTTACAC  
 AGCTATAGAT AAGCTGATAC AGGGAATGTC AGAWTCCATG ATGAGAGACC GAGCCTTTCA KTCTGTCAGA GGYACCTTVG  
 GTTGGCAAAA CTTCAAAAAG AGGGACCT

SEQ ID NO:17: (Length of Sequence = 415 Nucleotides)

AGCAYGGGCT GGGGGGCCGG GAGTATAGGC TGGGGCTTGT TTTAGCTCT GCCCCCACA CCCCCTCCTC TTCCGTCTG  
 ATTAAGCCCA AGGGTTGGTG GACTTAACCT TCAGCCCATC TCTAAGGGTT TCACAGACTG GATCTTTCTA AACTTTATTG  
 GGTACCTGCT TCCCCCTTTC CTTGGTAGTT TTCATCTACA AAAAGTCAA ACCTGATCGA AATAGAAATA AGATCATCAA  
 ATTGGACCAT TCTCTTAGCG TTCGAGTGT CCGGCCAGAC TGGCATTGAG TACACGCTGA GATCCAAJCA CATCACACTG  
 GCCTCAGGTC ACCAACTGCG CACTCAGGGC ACAAGGCTG CCCTGTGGT CACAAGGCTT TCCTTAATGT CGTCGGTGCC  
 CAGGTGAACC ACAAG

SEQ ID NO:18: (Length of Sequence = 356 Nucleotides)

GTATGATGT CTGTAGGTAT TTCTATACIT AACCATCTGT GTCCCAATTA AGCTAAACAT GATTCATTCT GATGCCAACC  
 CCCATCCATC ATGCCATGGA TCGCTCTAGA CTTCTTCCCT TGTAACCTCC CACTCAAACA GTGAGAAACC TTTGCCAGT  
 ATGTTTTGGA GTAACCTCAC TGGGAGTTTG CAGTCCCACT AGATGAATGC CAACCCATTT GTTCATTTAA AAGGACTTTT  
 GGAACCATAG AGCAATGGCT GGGCTGGGTC TVGCACGTT ATCTTGACTG AAACAATTGG CCATGAAGGC ACTTGCCAAG  
 GAAACTCTAG GGGCCACAAG GGTCTTGGT GCTTGC

SEQ ID NO:19: (Length of Sequence = 339 Nucleotides)

CATGCTTCCA TTTTITTTAG TTTTAAACCA CCAACCAAT ATTTTYCCT TAAATTTTAA TCTTATAATA TAGAAATCTT  
 ATGTAAATGA AATTTTGTCA TGTTCAAAT AAAGAGAACT GAAGTAGAAA ATAGAAATGC CAGTAAACAA CATAATGTTT  
 AATTTACAAC TTACATTAGG GGTITGGGGG VATGCTAATT ATATATTGAG AATATACATT AGAACTCTTC AAAATGGGCT  
 CTTCTAATGA GGTCACTACT GAACATAATT GTTCCCTCTT CTGTAAATA GAATAGGTTT AAATGACTAG TCCAAATGGA  
 ATTATTGCCT TCTKGTTAA



115

SEQ ID NO:20: (Length of Sequence = 437 Nucleotides)

AGAACAAGGG AACTCAGCAG CCCCTCCCTT CCCATCAGCT GTTCCTGAGA GATGCAATAT AGTAGTCATC GACATCATCC  
 TTATCAACAG CATCATCACT CAGACAGTGG TGAAAGTCIT TCTTCACAAG GAAAAACAAA GATAAAGAAA TACATGAGCA  
 TTAATCAGAA ATTTTCAAAG CTGGATTCT AATGATATGC ATTATCATT GACATTCAAA TGCTATACAT CTTCTGATGA  
 AGCCTCCTTG ACAGCAGCTA CACTTATTTT ACATTAGAAT GCCTAGAGAA ATCCTGACTG CCCAGCTTGG TCATGGGACC  
 TTCCCCACTC TCTCTTGGG GGAATGAAAA GATGTGGCGG CTTTCTACTT TTGCTACTGA GCTGGGGTAT ATGGCTAGGT  
 CCACITTTCTA AGGGGCTTGG AAGGGTTATT CCATCTG

SEQ ID NO:21: (Length of Sequence = 385 Nucleotides)

GTITGATTG CTTTTTTTTT AGAGTTTAC ATCAGTGTTT TTCAGGAATA TTGGTCTTTC ATTTTCTTTT CTGGAATAT  
 TTTCTAGITT TACTTTGTCA GAGTAAATTC TGGCTTCACA GAATTATTTG TAGTCTCTCC TGCTTGTTT TATTCATGCT  
 GCTATAACAA AATACCACAG ACAAGGTGGT AATAAATAAC ACAAAATTTAT TTTTCCCAGT TCTGGAGGCT AGGAGTTCAA  
 GAAGCTGGCA AGTTCAATGT CTGGTGAGAC CCATTCTTTC ATAGGTGGCA CCATCTAGGG GTCCCTACAT GRCAAAGAGA  
 TGAAGGGGCC AAAAAGATGG TGACCTATTG TGAGGCTTT TTTAAAGGGC CTTVAAATCC CAGTC

SEQ ID NO:22: (Length of Sequence = 374 Nucleotides)

ACCTTCATGG TCATGAAGGC CATGCAGTCT CTCAAGTCCC GAGGCTACGT GAAGGAACAG TTGCTCTGGA GACATTTCTA  
 CTGGTACCTT ACCAATGAGG GTATCCAGTA TCTCCGTGAT TACCTTCATC TGCCCCCGGA GATTGTGCTT GCCACCTTAC  
 GCCGTAGCCG TCCAGAGACT GGCAGGCCTC GGCCTAAAGG TCTGGGAGGG TGAGCGACCT GCGAGACTCA CAAGAGGGGA  
 AGCTGACAAG AGATACCTAC AAGACGGGAG TRCCTGTGCC ACCTGGTGCC GACAAGAAAG CCGAGGCTTG GGTCTGGGTC  
 AGCAACCGAA TTCCAGTTTA GAGGCGGATT TVGGTGTGK ACGGTGTCAG CCAC

SEQ ID NO:23: (Length of Sequence = 322 Nucleotides)

CAAAACGTGA TCACCACAGC TCCGTTCCTG CAGTGACACT TAACATACTC AGCATCTTCA TGAATTCTGA ATAATTTACT  
 GATCGTAAAG TCTAAAAGTA TCAATTTTCA GTGAGCAGTT TTAAATCAGA AAATAGTCAA TAGTTAATCA TGACTCTTCA  
 GGGTATTTTC TTACGTCCT CTGAAGAGTT TCCAGAACA TTCTTGTGAA AAGGAATGCC TCCCAACAAT GGAGAGCAAC  
 AATAGCAACA GGCATCTGAA TCAGCCTGGC CTCTGAAAAC AGACCANAGA GGAGTTTATC TGTTTCTTCC AGTGGAGGAA  
 GG

SEQ ID NO:24: (Length of Sequence = 113 Nucleotides)

CCTGAAATCG GAGTCTTTTG GACTGACTCC AAATTCAATG GGTGGCACAG GCAGCAAGGA GTCCAGTGA ATCTCCACCC  
 CGTTAACAGG CGGGACGACA GCCCCTTGCA GCC

SEQ ID NO:25: (Length of Sequence = 399 Nucleotides)

GGAAAGAATG AAGGAAAAAC AAGACAAAAT CTACTTCATG GCTGGGTCCA GCAGAAAAGA GCAGACGCTG GCCTCAGACA  
 CAGACAGCAG TCTTGATGCC TCGACGGGAC CCCTTGAAGG CTGTGATGA TAGGTTAGAA ATAGCAAACC TGTGAGCATT  
 GAAGGAATC TCACCTCCGT GGGCCTGAAA TGCTTGGGAG TTGATGGAAC CAAATAGAAA AACTCCATGT TCTGCATGTA  
 AGAAACACAA TGCCTTGCCC TACTCAGACC TGATAGGATT GCCTGCTTAG ATGATAAAT GAGGCAGAAT ATGTCTTGAA  
 GAAAAAANTT GCAAGCCACA CTTCTNGAGA TTTTGTTCAT GATCCATTTT AGGGTGAGCA GTTAGAGTAG GTTGAATTT

SEQ ID NO:26: (Length of Sequence = 355 Nucleotides)

116

GATTGGTATA CGGGCAACAA TGGATTGATA GCGTTAATAT AGAAATAGTT CCAGCAGGCC AGATGCAGTG GCTCAATTCT  
 GTAAACCCAG TGCTCTGCAC AGCTAGGAAG GAAGATCACT TGGGCCCAGG AGTTCAAGGC TCCAGTGAGC CATGATCAGC  
 CCACTKCTC CAGCCTGGGT GACAGAGTNA GGCCCTGTCT CTAATAAATG AAATAGCTCC ATCAAGTCAA TAATTAAAAG  
 TTCAACAGCC CAACAGANCA AAAATTGTAA ATGANCAAA ATTAGAAAAT GTACAAATTA AATATTAATG ACCCATAACC  
 CTATAAGGGA AAGTTTAACC TCTCTAGTAT TTTTT

SEQ ID NO:27: (Length of Sequence = 322 Nucleotides)

AAAACGTGAT CACCACAGCT CCGTTCCTGC AGTGACACTT AACATACTCA GCATCTTCAT GAATTCTGAA TAATTTACTG  
 ATCGTAAAGT CTAAAAGTAT CAATTTTCAGG TGAGCAGTTT TAAATCAGAA AATAGTCAAT AGTTAATCAT GACTCTTCAG  
 GGTATTTTCT TCACGTCTC TGAAGAGTTT CCCAGAACAT TCTTGTAAGG AGGAATGCCT CCCAACAATG GAGGAGCAAC  
 AATAGCAACA GGCATCTGAA TCAGCCTGGG CTCTGAAAAC AGACCAAAGA GNGTITTTTC TGCTTTCTTC CAGTGAGGAA  
 GG

SEQ ID NO:28: (Length of Sequence = 287 Nucleotides)

TATTTTTATT AAAGGACCAC CCTGGCTGTM GTGAGATGAA TGGATTCAAA CAGGGCAAGA GTGGATACAG MGAGATAAGT  
 TAGGAAGCTG GTATAGAAAT CTGGATGAGA TATGGTGGCT TGGATGATAC TAGCAGTGAG TATGGGAAGT AGGTGGATTA  
 CTTTACACTT TTTTAGATCA GTCTATTCTT GATGCTTGA AGACAAATTA ATCTCATATA TAACTCTAAA CAACATATTT  
 ATATTTTCATG TAAATAAGGA TAATGCTGAC CAAATATTAG CACCTTT

SEQ ID NO:29: (Length of Sequence = 282 Nucleotides)

CAGGGCAGGG AAGCCTGGAA GCAAGGAGG ACCTGGCTCC TGAATCTCAG AGAGGATAGG CTGGGATCCC TGGGCGAGGC  
 CTGTTCTCTG GCTGGCCAAT TTAGTCTTTC AATGTCTTAA GGGCTCTCCA TTGCTGCCC TTGCTCTTT CTAGCCTGTT  
 ATTTCTAGGC TCCTCTGAAT AAATCTCAGG TTTCTACTG TCATGCCTTT AGTTCAAAA TGAGAATCTG CCTACAGTG  
 CTGGCCTCT TCCGGCTGA AAGCCAGCAC CTTKCGACCC GG

SEQ ID NO:30: (Length of Sequence = 345 Nucleotides)

GAAGCTGGTG AATACATTTC AAGACACAAC ATGGCACCTG TGTCTAGCTC TATGGTACAA CATGGTACTA TGACACATAT  
 AATGGGTGTC CAGATGGGGA AGGCAGCTTC TCTGCAACTG AGCTGAGATC TCAAAATAGA CAATGTCAAG ATGGAATGAG  
 AAGGGAAAAA CAGCATGTGT AGACAGGTAG TGACAAAGG CTAATTAAGG ACTGAAAGAA ACCAGTGGCC AACAAGGGAA  
 TCTACGGGTG ATAAAGATAA GACGGTGAGA GAGATAAGGC TAGATTGTAT AAGGCTTGAC AGACCATAGC AAGATAAGCA  
 AGGACCTGTC TCTGTAAAC CATTT

SEQ ID NO:31: (Length of Sequence = 343 Nucleotides)

ATAAAATTGG TCTGGGTACC CTAAGGTGTT TGCKTTGATA GAAAATTGAC ACCCCAACT AAGTGTCTA CTTAGCTTCT  
 ACAATAGTGA TTCTAGACC TTAGATTAGT CATTACATTT TTATTTAAGG TACTATGTTA CTTTCATGAC TACAAATGA  
 GGCACCTGTA CAAAACAGGA ATGAAAACAT ACATATACTG TCTTGTCTTT ATGTCTGATT AATGCCAAG ATATTGTGAG  
 GGATTATTTT AAAGAAGCCC TTAGTCATGA TGGCTATTTT TAAAAATGGC ACAGGACAGT AACAGGCTGA AAAGAAACAC  
 CTGGTTTGAG GGGCCAAATT AAG

SEQ ID NO:32: (Length of Sequence = 153 Nucleotides)

117

ACAGGATGGT CAGGACAAGC CACCTCTGGT AAAGTGACAT TTGAGANGAC CCCTGAAGGN GGGGGGTGA GTCATGTGGA  
CATCTTGAGG AAGAGTTTAC TGGCACAGGG AACTGCAAGG KCAAAGTCCC CAAGTACTAG GGCTGGGGGC AGT

SEQ ID NO:33: (Length of Sequence = 257 Nucleotides)

TCAGTCAGCT TATCGCAGGT GCAGCCAAAC ACAAGCTTC AGGACAAATT GTACAACTT TACAATGTGG GATTTAAATT  
TAAAATATGA TACATAAAAA TCTACACAAA ACTGATAAAA ATCAAGCACA GNTACCAGGA TTGAACTTA TAATAATCCA  
TGIGTGAAAG GGAGICTTGT TTCCTTTCAA GTGCTTTTAT TCTGCTATGG AACAGTCAAA ATGGAAGNTG TAAAGCTTGG  
TGGTTAGTTT AAATTAT

SEQ ID NO:34: (Length of Sequence = 307 Nucleotides)

CTCCCACCCA TATCTAATCC AACAAAGTCCA GCTGCCTCTC TCINAAMAAT ACCNARGATC AGGCCCTTC TCAGCACCCC  
CACAGCTGCT GCCCCAAGG AAGCCACGTC ATCTCTCAG GAGATTGTC AGCAGCCACT GCCTCTTGT CACCTTCGCC  
TGIGGTTCATT CTCCCACAT GGCCAGGGAA TGCGTCTGT TAAAGTCTGC TAGGTACGG TCCTTCTAC TCAAAATGCT  
CCCYTGGCTC CCACTGCCCC CAGAGTAAAA AGCCAGACC TTCAAATGAC ACAAGGCCT ACAACGA

SEQ ID NO:35: (Length of Sequence = 266 Nucleotides)

TCCACAGGTC ATCAGATRCC TGCTNGATAA TATATAACA GTAAAAACA CTTTCACTTC TTCTATTNT AATCGTGTGC  
CATGGATCTG ATCTGTACCA TGACCTACA TAAGGCTGGA TGGACCTCAG GCTGAGGGCC CAATGTATGT KTGCTGTGG  
GTGTGGTTGG GAGTGTGTCT GCKGAGTAAG AACACGNTT TCAAGATTCT AAAGCTCAAT TMAAGTGGCA CATTATRAT  
AAACTCAGAT CTGNTCAAAA GTCCGG

SEQ ID NO:36: (Length of Sequence = 388 Nucleotides)

CAGCTTTGGA AAGACTTTGA CCTCTGAACA AAAAGCCAGA AGGCTGCTTA AAGAAATAGT AAGGGTTTCA CTTGCCCTGG  
ATAGTCACAA ATCTAGGAGT ACTGGTTCAC TGCCTTGGGT TACCAGGTAT CAGCTCTTC ACAATCTCTC CTCTTCCCAT  
GCTTCCCTT AAAGTCCAGT TGACAAATGA AAAAGAAAAA AAGGCCTTGA TTTATAGTAT TGCCAAACAA CCTCATAAGA  
ATGGGTAAAA TTACATACAC ACATACATAG AGAAGGGAGG TAATGCTGTG AATCTACTTG AGCTGGATTG CATGCTCCCT  
AGGGACCACG GTGCCCAACC TGTAATTTTA TTTCTAATT TTATAAATAT ACTCCTTTTT CACGGATG

SEQ ID NO:37: (Length of Sequence = 342 Nucleotides)

GAATGTCTAC ACAAGGAAGT ACAGGATTG GCTTTTCTAG ATGTCATATC CAAACTTCGC AGTCATGAGA ACAAAGTGT  
TGCCCAGCAG GCCTCTCTCA CAGAGCAGAG ACTTACTGTG GAAAGCTGAG AACTGCCCGA TACACGGCAT CATCCCATCT  
CTAATTTCCC CTCGTCTC CATCCAGCGG CTCTTCCGC TTCATTCTT ACCATACCAC TTGTGCATGC ATGTRATGTT  
CTAATACCAA TTGAAGAACC GCTGTAGGTA CCTCCCTAAT AAGGATTCT AAACCTATAG TTAGTGTGAT CATGACTTTG  
GTCAAAGGCA AGTYTCCAC CC

SEQ ID NO:38: (Length of Sequence = 355 Nucleotides)

GATGACTTGG AGAATGCCGA AGAGGAAGGC CAGGAGAATG TCGAGATCCT CCCCTCTGGG GAGCGACCGC AGCCAACCAG  
AAGCGAATCA CCACACCATA CATGACCAAG TACGAGCGAG CCCGCGTGCT GGGCACCCGA GCGCTCCAGA TTGCGATGTG  
TGCCCCGTG ATGTTGGAGC TGGAGGGGGA GACAGATCCT CTGCTCATTG CCATGAAGGA ACTCAAGGCC CGAAAGATCC  
CCATCATCAT TCGCCGTTAC CTGCCAGATG GGAGCTATGA AGACTGGGGG GGTGACGAG CTCATCATCA CCGACTTGAG  
CTGGAGTCAT CTTTCTGMC CTTTGCCCCA TGCCC

SEQ ID NO:39: (Length of Sequence = 303 Nucleotides)

GCCAAAAACA NYTCTGAACC CGTTTGGGA AATAATGGGA TTCCTTGATC ACGGGACAAC GAATCACCCCT GAAGTTTTC  
TCCAGTTTAC TCAGTCACAT AAGCCACCAG AGGCTAACCA CACTGACAAC AAAAGCAAGT CCCAGGATTC CGGGGGCTAA  
TACCATGCTA GGCATTACTT GGGGAAGTAT GAGTTGGTAT ACATCTGTGA ATTTGGTGGG AGGAGAAAAC TAACAGTAA  
TTTATCAAAG CCACTGGTAC GTTCAGCGTT ATAAAAATTA CAAGGATCTG CTTCTCGGCG ACT

SEQ ID NO:40: (Length of Sequence = 178 Nucleotides)

GGTGTCCGGG GCTAGAGATA CACATGCCAG TNCITACAT TTCTCAGCAC TGTGCTGTG ATTACAGCA GTTCAATTGT  
TCATGCGATA TAAGCCAGTC ATGTGGCCCA AGTTATTCTG TCGGCTGTGT TCTCTGCAGG AATCTGATGC AAGAAGGCCT  
GAAGGATGCA TGGCTTTT

SEQ ID NO:41: (Length of Sequence = 322 Nucleotides)

TGCTTTTCTT TAGAAATTTA GGGCAGTGTG ATGCTTCCAG AGGTCTGTAC AAACACCAGC TTTCATTGTG CTTGGGAGTT  
TCCATGCCCTC TYCCTTCTCT TGCTTAGTG CACGTTTCTG CTTTATCA GTTTGACTGC CTGAGACTGA KTCCAACAAC  
CCAAACTGAA CGCTCAGCTC CTCCKTTTCA AAGGAGGATG ACTTNTCTNA ACAACTATTT AGGTGAATTA TTKCKACAGT  
TTATTAAAGC AATGGCTCTA AACAAATTCC ACTGGGGGTG ACAAAGTACA ATACAAAAGG CGTACTCTGA GGGCTTGGGG  
GT

SEQ ID NO:42: (Length of Sequence = 278 Nucleotides)

AAACTTTGGC ATTTTATTTC AGACACGTAT AAAAACAAAA CAAAAACTT CAGTGATACA ACAGACGTTT TCCCTTAGTT  
CCCCATCCAA GGGGACAGAG GTGTGCAGCT GAAGCTGGAY CTTTTTCTG TCTACCTGG AAGCTGTCTC ACTGCTGGAT  
GAGAATGGCT TCTAAAAGTG GATCTTGGGG ATCCTTGTA ATTTGCCCTC GGATAAGGAG TGAAGWTCAT TTACGGCACA  
TGTGGATTAT GGTTTACACA AAGATGTCCA GTTATTTT

SEQ ID NO:43: (Length of Sequence = 225 Nucleotides)

AGATCAAAAG ATGAGAGAAG CTGAAACAGA ACCGCATGAG GGAAAGAGGA AAGTGGAAATC TCTGTGGCCC ATCTTCAGGA  
TCCACCACCA GAAAACCCGT TACATCTTCTG CCTCTTTTAC AAGCGGAAAG CCAGCAGCAG GATCTCTAGG AATATTAGTA  
TTAAAGAAGG CTATGCAGCA TAAACCTGAT TTCAAAATGG TAAAGCAAG GTTATGTGTA CTGT

SEQ ID NO:45: (Length of Sequence = 305 Nucleotides)

GGATTGCCAG GAGCTGTTC AGGTGGGGA GAGGCAGAGT GGACTATTTG AAATCCAGCC TCAGGGGTCT CCGCCATTTT  
TGGTGAAGTG CAAGATGACC TCAGATGGAG GCTGGACAGT AATTCAGAGG CGCCACGATG GCTCAGTGA CTTCAACCGG  
CCCTKGGTAG CCTACAAGGC GGTGGTTTTG GGGGATCCCC ACGGCGAGTT CTGGCTTGGG TCTTGGAGAA AGGKGCATAG  
CATCACGGGG GGACCGGAAC AGCCGCTGG CCGTGCAAMC TGCGGGGACT GGGATGGGCA AACCG

SEQ ID NO:46: (Length of Sequence = 264 Nucleotides)

ATGAAATAGC ATATCTNNGC CTAATTAAAA GATTCCATTA CATTACTTTT TATCATTTAT ACTGCCAAGG ATCAGTCACA  
AAAAATTCAA ATTATACATA TTATTCATGC TTAAATTTC TAAATAAGTA AATTAAAGCA AGCCAATATG TCTCTCTTCA  
TAACATAGGG AAAAATTACT GTTTAGCATA ACAGNGTAAT AGGCAAAGTC TAGCCATACA GCAGCAGTTC ACGGTGTGTG  
CAAGTTGGKA CAGGTTCAT CGAT

SEQ ID NO:47: (Length of Sequence = 175 Nucleotides)

GATCTCTTCC AGCGTCAATG TACTGGGACA GCAAACACTC ACATTGAAG TTCTTCTGG CCACCGGCTT CCCAGTACAT  
TGACGCTGGA AGAGATCATC TCAAATGGTT CTCCAGTGTG AGGCTGGAGA TCTCCAGAAA TGGAGTCTAC TCCTGGGGTG  
GCTTGATGG GAGCC

SEQ ID NO:48: (Length of Sequence = 270 Nucleotides)

GTCTGTCAGA GGNACCGGGC AGCTCAMRCC CACAGCGGCT CCTCATCTC TGTGGTGGCA TCCTCATTC ACTCTCATCT  
GCCACCTKCT CAGGCGGGCC TCTAGCTTTC TCATGTACTC TAGCAATTCC TGTTCCTCT GCTGTAACTG CTCCTTTTCC  
TTCTGGAGCA CACGCGGGC TGACCGCAGC TGTGTAGCT TCCGCTTACT TMTGACAAAC TGTACCAGGC TAGAATCCTT  
TCTGCCTGGG TCAGCTTCAG TCTTTGAACA

SEQ ID NO:49: (Length of Sequence = 359 Nucleotides)

CCCTGAAGAG TGGGTGGGAC AACCAGATGG GTGTAACCCC TTGTGGGGGA AAAGGAGTGA GTTTACTTGG TAAAAATA  
ATGGTAATGT CAGCAGCGTG GCTGGGGGAC TCAGTATGGT CCCGGGAAAA GAGTTGGGGC AGTGAACCTC CCAGGCCGAC  
TGGCCTTGGG CTGGCAGCAG GGAGGCTGCA GGGCGCCTAC CTMCTCTGCC ACGTCCCTGC CTAGGAAACC TATCCCAGGA  
CACCTGCTT TGGCCTGGAT AGCAGCCTAG GGATGAGCAT TTCTTTGAAA GCAATTAGGT TATTACCTG GTATTAAAC  
TATTTACTGT TAAAAATCT GTGACTTCAT GGARGTGGG

SEQ ID NO:50: (Length of Sequence = 271 Nucleotides)

CCAGGAAGGA CAGGAAGTGT CCTCTAATAC GCATAAGATC CAGTACAGGA GAGATGGGAA GAGAGKCTCC AGGATGAAGG  
GGAAARAGG CCGCATGCCA GTCACCTGGC ATCTNCCAGA GAGGGYCAGY CTTCCCACTG AGACTGGGGC ACGAGTCCCG  
TCATCACCAT GCCCTCTGAC TGTGGAACCTG TCTTTTACC TGACAAATAC TACACAGGTA TCGMTCTGG CCATCTCTG  
CTATCTAAC CCAGGAACCTG ATTAGATTGT T

SEQ ID NO:51: (Length of Sequence = 226 Nucleotides)

CTCCAAGCAG TAAAGACTTG CAAAGCATTG CATTTTGATT AAACCTTGCT GGGCTGAAGG GCAGGCAGAG CTGTGGTGA  
CACTGGCAGG ACGCAGCACC CCCGACTGG CCTTGGCAG GCTGCACCG GCGCATGCGG GTGTGGGCCA GGGTGTCTTT  
AGGAAGCAGG TGGGAGTCTK NCACTGTCAG KCGTCCAGG AGKGYACCAK GCCTGGCAGG GCACTG

SEQ ID NO:52: (Length of Sequence = 408 Nucleotides)

GGTGGGGCAA GGTGGGGGTG AAGTGCACTC CTGCTGCATG AGTGGCAGG CAGGGTGCAC ACACACAGT GGGTCTGGC  
TGGGTGAGGC AAGCAAAACC TGCTGCACA TGGCAAAGG ATGTGGGAAG TATCCATGGG CACCAGGGGA AGCTGCAGTT  
TGGGGAGGGA ATGGGTGGCA CTGCTGCGTG TCTGTGGGG CCACCCCACT GGGGGTCTCC AAGTGGTCAA GTTCCGTCTG  
CCAGGTAGA AGCTATGATG GGGGCTTCTA GGACACTNGA GGCTGACCTG AAAGCAAGGT ACTTTTCACA CTGGGACCTT  
GCAAGAGGCC AACAGATTGA AGGGATGCTT CAGGTGAGAC TTGGCCCTCT TCTTATGGG CAAGACCTTC CCCGAGAGT  
TCAGATCT

SEQ ID NO:53: (Length of Sequence = 314 Nucleotides)

TTCTGTGCGAG GAGGACCACA TGGCAGTCCA GCAGACTGCA CATTTTAAA AACTAGGTCT TCCCAGGTAG TTTGAGGAGC  
ACCAGGGCAC ACTCAGGGAA GGGACATGTC AGTGTCTGAG AGCTCACGGG AGGAAGGTGT AGTGACAACA TGGACCATG  
TGGAGTGAAT TTAGACGGCT CTTGGGTNAG GAGAATCATC ATGTAACAAA GCATTAAATC ATTTGGAGAA ATTCAGAAAA  
NTCGTAGATG TACATTCTAG CCCACTTACC AGGCCTACTA AACGTCAATC AGATATATTT CAATTTGAAT TCGG

SEQ ID NO:54: (Length of Sequence = 310 Nucleotides)

AAGCCACCGC ACCTGGCCCA TTACATTTAT AATGTTATAA GGGGGTTGAG GGGTGTCCA CTGGAGCAGT GGTTCCTCAA  
CTCGTGTATG CATAGGAATT ACCTGAAGGG CTGTGTTAAA CACAACTGC AGGGCCCACC CCCAGAGTTT CTGGTTGGGG  
AGGTGTGGGC TGGGCTTGAG GATGTGAATC TCTCACAAGC TCCCAGGTGA GGCTGCTGGT CTGTGGACCC ACTTCAAAGA  
CCCAGTGAAT CAGAAGAGTC AGTGAGACTG GACAAATGAA CGCAAGACAG TCTTCAAAGG AGACCAGAGS

SEQ ID NO:55: (Length of Sequence = 252 Nucleotides)

TTTTTTTTT TYCCGGGGAR GTCAACATA CTTTTCAAC ATAGGATKTC TGACAGGAGG CCCTTGMCA GGGTTCCTG  
ACCTCTGYTT CAAACCCAC TGGAAACAGA GCAAAGTCAT CAMGAAAACC CAGGACACCA GGGCAGGGG GCTGCACAAG  
GTCCGGTAGG TCACAGTGG CCAGCACACA GTGGCCCCG CCAGTCCAG CCCAGCCTGG GGGAGGGTGT GAGGGTTCCA  
KCAAGCTCA TT

SEQ ID NO:56: (Length of Sequence = 188 Nucleotides)

GTCAAGTCTA CCATCATCTT AGAAGGAAAA GGCATGGTGG GAATTCAGCA CCTGAACCTG TATTTACACC AGCCTCGGCA  
TCTGGCAAGG RAATAGCGAT TGTTCAATAGT GATGCAGAGA GAGAACAGGA GGAKGAAGAA CAAATACACA CAAACAACCTG  
ATCTAGGGAG ACTCCAARGA TCCAACAG

SEQ ID NO:57: (Length of Sequence = 304 Nucleotides)

AATCAGCCTG CAAGCAAAAG ATAGGAATAT TCACCTACAG TGGGCACCTC CTGAAGAAG CTGATAGCTT TTACACAGTA  
TTAGATTGAA ATAATGGACA GAAACACATT CTGTCAAGA AAGGGGGAGA GAAGTCGTG TTCAAGTTTC AAAGCAAAA  
GCAAAAGTGA AATGATTGTA GGATTTCTGT TCTAATTGGA GATGATTCTC TGGTTGTTAG AAATGGCAAA TATTGATGAT  
TGTTGCTAT TGATTGGTGC AGGATACTTG GTATACGAGT AAATACTTGA GACTCGTCTC ACTT

SEQ ID NO:58: (Length of Sequence = 261 Nucleotides)

CCAGAAGCTT CTGCTCTCTC CTGTGCTCTC AGTGGTCCC TTCCCTGAAG TGCTCCCTT CTCATTAAAT ATAGCCTGTG  
TCTGAACATT GTGAGCTATA AGAACCTCA TATTAATGGT TAAGGAGCTG TTGGAAATGA TGTGATTTTA TTAATAATGG  
GGTCTTTGTG GAGGAGTCAG GAATGGTCAA AATGAGCTTC AGGTATGGGG CTGTCTCTRT GCTCTGATA CCAAGGGTCT  
GGCAAGCACA AAGGAAGGTG G

SEQ ID NO:59: (Length of Sequence = 470 Nucleotides)

AATACGTATT CTGAAGCCAC TATATCTGCA TATGTATCCC AGATTGAAC AATTAAGTAA AAAGATGGTG AATGATGAAA  
GCCAGTTTTC TGTCTGTAGA AGTGAGAGGT GACAGATAAC CAAAGGAAGA AGGCTAGAAT GGATAGAGGA CAGTGCTTAA  
GTGTAGTTCC TGTGCTTTT AGTCTTATAG ACTTCATTTT CAAAGTTTCT TAGCACCCCC CTCCCCCTT TGGTGAGGTT  
GTTTCACATA TTTTCTAGAC AATTAGATT TTTTGTCAAA GTCTGTGTT CATCCGGAGA GCCTCTGATC TCTTAAATGA  
TTTTTTAAAT TTACATACAT TAAGGTTTAC TCTGCTGTAA AGGTCTGTGG GTTTTAAATCC TGCTCTACAG TTTTTCATA  
TGTGCGCTT CTGCTGGGA ATACTCTCCC AGATATTCCC CATGACTGGC CCTTATCTT CAATCAGATC

SEQ ID NO:60: (Length of Sequence = 466 Nucleotides)

GTGTTTCAAG GGAAGGCAAC TMCAAGTTTG TGCAGCTGAA TTTCTGTAA GTTAAGACAG ACTCAMCTTC TCAITCAATC  
TGGGGCAGTG GATAACCTTT CTGAATAGAC CCACTGTTC ACGGACAGGG ATAGAGGTTT GCCTTCTTC TTTCTTGAA  
TTTGGAGTGA GCACTAGGGA GGGGAAGTGC ATGGGTGACA TGAAGAAGGT GAAGATGTAG TAAAGCATC ATCCAGGTAC  
ACATTACGG TGCTGCAGAA TTTTCAAT ACACTGAGG GAGTCTGTAG TGGCAAAGC AATTACTGAG CACAAAAGCC

AGTCCTCAAG GGCTGATTCC ACCTTCCCTG TCCAGGGACT TTCTCAGCAA ACTTTGTTCA TGAGCAGTTG TTGCTTTGA  
TGGTCTTAGC CAGTTTTTGG TGCAGGGGTG TTCTCTGGT ACTAGGGCTA GGGCAGCTGT TTAAAG

SEQ ID NO:61: (Length of Sequence = 491 Nucleotides)

GACACCCCTC CTGCCATGAA GAATGCCACT AGCTCTAAGC AGCTCCCACT GGAACCAGAG AGCCCTCAG GGCAGGTGGG  
GCCTAGGCCA GCCCCCGGC AGGAAGAGTC CCTTCTCTCT GAAGCAAAGA GCAGAGGACC CACCCACCA GCCATGGGCC  
CACGGGATGC CAGACCTCT CGAAGGAGCA GCCAGCCATC TCCAACAGCA GTGCCAGCCT CCGACAGCCC TCCCACCAAG  
CAAGAGGTGA AGAAGGCAGG AGAGAGACAC AAGCTGGCAA AGGAGCGGCG AGAAGAGCGT GCCAAGTACC TGGCGGCCAA  
GGAAGGCAGT GTGGCTGGGA AGGAGGAGAA AGGCCAAGGT GCTGCGGGAG GAAGCAAGCT CCATGGAGCG CCGCTGCCGG  
TTTATAGGGAG CAAACGTCTT AAAGCGAGC AACGCCGTTT AAGCCTTGA GGAACGGCTA GCGGAAGAAG TTTGTGAAA  
ACAAGGGGCG T

SEQ ID NO:62: (Length of Sequence = 478 Nucleotides)

ATCATTGAGT ACGCAGAGCT CAAACAGAC GTGTTCCAGA GCCTGAGGGA AGTGGGCAAT GCATCTCTTT CTGCTCTCTC  
ATAGAGCAAG CTCGTCTCA GGAGGAGGTC TGCGATTGTC TCCATGCCGA CCTTCCAAA ACATCTTGCC TAGAGTCTAC  
ATCAAAGAGG GGGAGCGCCT GGAGGTCCGG ATGAAACGTC TGAAGCCAA GTATGCCCCG CTCCACCTGG TCCCTCTGAT  
CGAGCGGCTG GGGACCTCA GCAAATCGCC ATTGCTCGCG AGGGTGACCT CCTGACCAAG GAGCGGCTGT CTGTGGCTGT  
CCATGTTTGA GTTCATCTG ACCCGATTG GAGCTACCTT CAGGACCCAT CTGGCGGGC CACCGCCACC AATGCGTATG  
ACGTGATGA GTTTTTGAGT TCACTGCTGT GAGCGCATGA GTCGTGTACT GAATCCTGTG GACAACGGTT AAGTTACA

SEQ ID NO:63: (Length of Sequence = 183 Nucleotides)

CCTGGAAGT GGGGGTGGC CAGGGGCCA GGCCAGCAT GCACCCCAT TTTTTTGGG GCTGATCCCT GCCCCAGCTC  
TGCTGATACC CGGGGCCACA GCGTCAGGCC GTTGGGGGTG GAGKTAGAGG TGGGAGAGCA GGGGAGAGAG CCKAGGAGC  
CACAAITGGG CAGACAGAAG CGG

SEQ ID NO:64: (Length of Sequence = 316 Nucleotides)

GGATATTGCA CCTTACAGAC TTAGGGAGCC TTTACCAGAG ACGCCTAAAA CGCCCCAGGT TCAGCCATTG TGCTGAATAG  
AGTGAATAT AGAACCAGG ACAGAGTATT TCATTTAAG TTGATATATA CTGTCTAAG AACACTAAC AATACTGTAA  
CTTGTATAA GGACATAGTA TTGAAATGGG AAATAGAGT CAGGCTCACA TCATCTTAGT TTAATGCTGG GCACTTTTT  
CIGATTCTG TAGTCCCTG GAAAATGTGT CCTTCGTACC CATAAGTGG TACAAATGCA TTGTAAACCA TTTTGT

SEQ ID NO:66: (Length of Sequence = 411 Nucleotides)

ATCTGGTCTA GAGAGGCGAC TCCAAGCTCT CTGTCTGGCT CCCAGCTGTG GGAATCCTTT AGGCTTGTTC TCAACCTACA  
CGTTAAAAAT GCTTCTTGGT GTGTTTGGG AGGGGGAGAG GGAACTGAG CTCCTCTTG ACCTCTCCA ACACCTTGA  
CTGTCTTACC CAGCCATTTT CAGTAGCTAC ACGGGTGGTC ACAGAACT GGGCGGCACT CGGCACACAA CACAGAACCG  
GGGAGTCCA TGCAGGTGCG GGAACACATG TCGGACCCAG GGAGCAAGGA ACAGCCACC CCGAGGAACA TGCAAAACGA  
GGAAGGATTC CCTTCAGATT CCAAGGATGC CACAACCCG ACGGGCGGCT TAGGGAGGCA CCGATTATCT AAGGAAAAAG  
GCCACTGTTT G

SEQ ID NO:67: (Length of Sequence = 413 Nucleotides)

CTGCTCCTTA TGTTTTTATT TCCAAAGTTT AGAATTCTT TGCCTCATAG TATTATTTTA TTTTACTAAA TTACAGAGTA  
AGAAAAGCTT TTCATTTTAT CTGATTTTAT TCTAGAACA AAAATATTAC GATCTTCTAT ATTTTGTTC TTTTGCCAAA

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AAGTGTAGGC AATTTTACAT CATCTTTTTT CCCAATCAGT TTGTGATCCA ACTATAAAAA GGAGACATAG AATACTGAAT  
 AAATGAAACA GAAACTCCAA GGCCAAGAAG TGTCATCTTT GAAAGAGTGT TAGTGGCAAG ATATGTGACT GCAGACTAGA  
 TGTAGACAAA CCTGAGAAAA ACCAAGCATG GGGGAAAGGA TYCCTATTTT AATAAATGCT GCTGGGAAA ACTGGCTAGC  
 CATATGTACT TTA

SEQ ID NO:68: (Length of Sequence = 372 Nucleotides)

GCACGGTTAA AAGACCAACG TGTTGGNTC AAATATAAAG GCCACACCTT TCAGACCGAA CCTACTCAAA GATCCTTTAC  
 TTTGCAATAA TTTGAAGTGG AGAACCAAG ACGGGAGACG AATGAAAGCA AAGATGCTCA AAGAACCAAA GGAAAGACCT  
 GAAGGAATCC ACCTGCATAG GCCACGCGTT CCACTCTGGG TCAAATGCTT CCACGATGCA GAAACCTTTT TTTAAAAAAG  
 TGCAAGTCTA ATTACCTACC AAGGTAATA AAAAGCACAG CACAGGAATG ATTACAGCTG ATGGTCAAAA AACAAACCAA  
 AACCATTAAA AAAACAATCA GGCAGAAAAC AGGAGTTAAA TGTTACATA TG

SEQ ID NO:69: (Length of Sequence = 389 Nucleotides)

TCTAGAACCT GGACCCACCC AGCGCGTCTT TTCTTATCCC CGAGTGGATG GATGGATGGA TGGATGGTAG GGATGTTAAT  
 AATTTTAGTG GAACAAAGCC TGTAAGATGA TTGTACATAG TGTTAATTTA TTGTAACGAA TGGCTAGTTT TTATTCTCGT  
 CAAGGCACAA AACCAGTTCA TGCTTAACCN TTTTTCCTT TCCTTCTTT GCTTTTCTT CTCTCTCTC ATACTTCTC  
 TTCTCTCTT TTTAATTTT TTGTGAGATA ATATTCTAAG AGGCTCTAGA AACATGAAAT ACTCAGTAGT GGATGGGTTT  
 CCCACTTCTC CTCAATCCGT TGCATGAAAT AATTACTATG GTGCCCTAAT GCACACAAAT AGCTAAGGG

SEQ ID NO:71: (Length of Sequence = 329 Nucleotides)

GAAAAAATGG GAGGGCAGCC ATGTATTAAAT TGTACATCCA AGGAACTGT GCGCCAGGGG TCTTGTGTGT ATTTCTGAGA  
 AGAGGGGTGA GAAAAGGCAC TGTTCAACA TTTGCTTCTG CCTGAACGTG CACCTCCAG TGCTCTCCA TCAATTAGGA  
 GAACTGTCTT GAAGAATGCT GCCTCAGCTT CTGAAGAGAA GACCCAGGA CATGCATTAA TGAGAGGAGG GGAGTCACAG  
 CTGCAGAAGA ATAAAGCTCT CTGAGGGAGC CTGGGNGCC CAGTGGAGG CCTGGAGCTT GTTGACCANN GCAGCAGGAG  
 ACCCTGCT

SEQ ID NO:72: (Length of Sequence = 418 Nucleotides)

CTGAGTTGCC TGAGGTCATT CACATGCTC AGCACCAAGT CCCATCTGTT CAGGCAAATG CAGCGGCTA CCTGCAGCAC  
 CTGTGCTTTG GTGACAACAA AGTGAAGATG GAGGTGTGTA GGTTAGGGG AATCAAGCAT CTGGTTGACC TTCTGGACCA  
 CAGAGTTTTG GAAGTTTACA AGAATGCTT TGGTGCCCTT CGAAACCTCG TTTTGGCAA GTCTACAGAT GAAATAAAA  
 TAGCAATGAA GAATGTTGGT GGGGATACCT GCCTGTGTC GGCTGTGAG AAAAATCTAT TTGATGCAGA AGTAAGGGAG  
 CTGTATACAG GAGTCTTTGG AATTATCCCT CATGTGATGC CTGTAAAAAT GACATTCAIT CGAGATGCTC TCTCAACCTT  
 AACAAACACT GTGATTGT

SEQ ID NO:73: (Length of Sequence = 336 Nucleotides)

CTGAATTTT ATATGCTTCA CTIAGGCTTT CATTTGAGTA GACTCTAAAA ATTCTGCCTT GCTTAAGTNC TAACACTGCC  
 TCTCAGATTT CAGTTTGGGA CATTGCACAA CTAAGACCTT TTAACGCAT TTNCTTGCTA ACTCGGAAGA CACATAGTCT  
 GCAGCAAGAC ATTCTATAT TGAAGAAATG AGAGAAAATT TTATGCTGCA TCAGGTGGAG AGCAAGGCTC AACGGTGGT  
 GCATTAGTTC CCTCGGAAGT ATTGAAAAAN CTTTGAAATG GGAAGGAAA TTTTGTGCAC CTAATGTTC TGAGGTACCC  
 AGAATGTCTG GGGTT

SEQ ID NO:74: (Length of Sequence = 402 Nucleotides)



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GTGCTCAGTA AATACAAATT GGATGGACTA GAGAGATAGC CCGAGGACA CTGCCAAATA AATAACAAAT TGTGCAAGCA  
 GCAGGCCGCT GTAATTAGAC CAAGGAGGAC AGTCAGTTAT TAATATCAGA CACGTGGCAG GGTAAACAGC CACTGAGGGT  
 GGGTACAATG AAGAGAGTCA CTTTCTGCAC CCTCAGGGAC TTCCCTTGTTG ATGGCCTTCT AAAGAGGGCT GAACAGCACC  
 AAGTGCCCTC GCTGCCCTCG GTTCCCTGCTG CCTCCCGGT GCCTTGGGTG CCCCACAAC AGGGCCCTGG GTCCCTCCCA  
 TGTCCCTCTC CCTCCTACAA CCCCTCAGCC CCTTATCTGG CCAGCCATTA TGATGCCCTAT CAGTATGAGG CCAGATGAGA  
 GT

SEQ ID NO:75: (Length of Sequence = 454 Nucleotides)

GGACCCCGGG CCGCGATGT GGGCCAGTAC CTGCTCTCAG ACAGCCTCTT CGTGTGGGTT CTAGTAAATA CCGCTTGCTG  
 TGTTTTGATG TTGGTGGCTA AGCTCATCCA GTGTATTGTG TTTGGCCCTC TTGAGTGTAG TGAGAGACAG CATCTCAAAG  
 ACANATTTTG GAATTTTATT TTCTACAAGT TCATTTTCAT CTTTGGTGTG CTGAATGTCC AGACAGTGA AGAGGTGGTC  
 ATGTGGTGCC TCTGGTTTGC CGGACTTGTC TTTCTGCACC TGATGGTTCA GCTCTGCAAG GNTGATTTG AATATCTTTC  
 CTTCTCGNCC ACCACGGCGA TGAGCAGCCA CCGGTGAGT CCTGTCCCTG TTTGGTTGCC ATGCTGCTTT TCTGCTGTG  
 GACTTGCGGC CGTTTGCTCA TTACCGGGTA CACCACGGAA TGCACACCTG GCIT

SEQ ID NO:76: (Length of Sequence = 313 Nucleotides)

GCTTTGATAG CTAGTTGTCT AAAAGTGCTG NTTATTAAAT AATCCACCTN TTTCCCACT TAAACATCC CTCTTACCAT  
 ATACTAAATT CCNGTAGCCC TGGGTCTGTT TCTGGACTCT CCGTCTGTC TGACCCCTC CAGGTACAC TGAGTGAGGT  
 AATGGTGGCG TGAGAATCCT CTGGGAATCT GGCAGGNTCA CCCNGAGCA GTCCACCCN CAATCAITA NCATCGTTCA  
 GAGTGGNCTG AGTGTCTCA CACATCACT CTGCCAAATG CACTTTAGGA ACTGTCAAT TCCAAAGTTT CAA

SEQ ID NO:77: (Length of Sequence = 446 Nucleotides)

CTCAGCGTA GCCCTAAGTC GTTTTCCAA TTTAGGAAGC TCACAAGCA GATCTGCATT GTCAGTACC AGCTGTTGT  
 GAACCTTTGT AAGCTGTCC AGGTGTCT CAAGAAAGGA AATCTTCTGC TTTTGGGAGT GAATCCCCC ACTGTCTTCG  
 GGCTCCATTT CTGCATTTT CTGACTCGA GTCTGACGT CTGAACGAA CAGCTTGCGA AGGTGTGGC SGGTCTGGAG  
 TTCCCGGCA ACTGTCTCT CCAGACCTT GAGGTCTGC TTGTGACTGC TCAATGTGCG TCGTACAGAA ATGTGAGCTC  
 CTGCAGCTTT GGTGCTCTT TCGTGTCTT TCGTCTTTT AGCTTTCTCG TAGTCAAGCC TGAAGGCTT TCTAAGCTCT  
 AACTGGAGCT TCTGATTTAA GGTCTTTTGA GCTCATCAA TGGTCT

SEQ ID NO:78: (Length of Sequence = 296 Nucleotides)

AGCGGTGGC GCAATGAGA GAATGTGCT GAGACAGAGC GCTGGCTGG GGAGGAGGCA GCGCTGGNG CCGAGCTCTG  
 TGAGGAGACC CCGTGAATG ACAACTCATC CATCGTGGTG CGCATCGGC CCGAGGAGCG GCAGAAATAC GAGGAGGAGA  
 TCCGCGTCT CTATAAGCAG CTTNACGACA AGGATGATGA AATCAACCA CAAAGCCAAC TCATAGAGNA GCTCAAGCAG  
 CAAATNCTGG ACCAGGAAGA GCTGCTGGTG TNCACCGAG GAGACAACGA GAAGGT

SEQ ID NO:79: (Length of Sequence = 285 Nucleotides)

CCTTTCTGCT CTGGGAAGTG ATGACTCGCA GGTGGGCTT GCGCTGGGG GCTCCAAGCT GGTGCTGTG GGTAGGTGGG  
 GGCGGAGACT TGGCAGGAT GACCTGTGTT AGGCTGTGTC CATGGCCAC AGGGAGGAGG CCAGGGGAAG CCCGAGCACT  
 GACGTAGCCA TTCCAACAG GGCTGGGGCA GGCTCGTTA GCACTGTTCA GGTCAACNCC CAGCATGGCC  
 CCGCACTACGCTG GGCAGGCCA GGAGACACAC TGTCTCTG TAGTG

SEQ ID NO:80: (Length of Sequence = 402 Nucleotides)

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ATGATTTCCTT GCCTGINATA ACCTATGCAC TCACAAAGAT GAACTCTCTG AGAGGGATGA GCAAGAGCTT CAGGAAATCC  
 GAAAGTATTT CTCCITTCCT GTATTCITTT TCAAAGTGCC GAACTGGGC TCGGAGATAA TAGACTCCTC AACCAGGAGA  
 ATGGAGAGCG AAAGATCACC GCTTTATCGC CAGCTAATTG ACCTGGGCTA TCTGAGCAGC AGTCACTGGA ACTGTGGGGC  
 TCCTGGCCAG GGATACTAAA GCTCAGAGCA TGTGTGGTGA ACAGAGTGAA AAGCTGAGAC ACITGAGCAC ATTTTCTCAC  
 CAGGTGTAC AGACTCGCCT GGTNGATGCA GCCAAGGCC TGAACCTGG TGCCTGCCA CTGCCTTGAC ATCTTTTATT  
 AA

SEQ ID NO:81: (Length of Sequence = 246 Nucleotides)

CATTTTAAAT AGAGACGGGG TTAAACCATG TTGGCCAGGC TGGTCTTGAA CTCTTGATCT CAGGTAATCC ACCCACTATG  
 GCCTCCCAA GTGCTGGGGT TACAGGTTTG AGCCTCTGTN CCCGCCCCG CCAAGACTG CCTATTCTAA ACGTGTCTGA  
 GGACGTGGAN CAATCACAGC TCTCINTCT TTCCAGTGGG AGTTTAACAT GGCACAACG CCTGAAAACC GTTGGNGAT  
 TTCGT

SEQ ID NO:82: (Length of Sequence = 394 Nucleotides)

GGGAACCCCTC AGCAAAATAT AATGGTACCG CTATTATCAG CCTGTTCGA GGCCAGGGA TTTTGGGGGA GGTACAGTG  
 TTCTGGAGGA TATCCCTCC TTCGTGGGG GAATTGCTG AAACATCAGG NAACTGACA ATGCGAGACG AACAGTCTGC  
 AGTCATTGTA GTAATACAGG CTTTGAACGA TGACATTCCC GAGGAAAAA GCTTCTATGA GTTTCAGTTC ACTGCAGTCA  
 GTNAGGGAGG AGTCTGAGT GAATCCAGCA GCACTNCCAA CATCACGGTG GTGGCCAGCG ACTCTCCCTA TGGCCGATTT  
 GCCTTTTINAC ATGAGGCAAC TTCGAGTGTG AGAAGCACAG AGGNTAACA TCACAATCAT CCGTCCAGT GSAG

SEQ ID NO:83: (Length of Sequence = 308 Nucleotides)

ATAAGACCAT TGGCAAAGGG AGAATTCATG AACTGAAAGA TCTGAAGTAA TTTCCAGAA TGTAATGTTA AGAAATAAGT  
 TAAAAGGCAG AGCATAATGA GTCTAACATG TGTGATTGAA GTCTTATAAG GAGAGAATTA AGAMCAGSCA ATATTTTAA  
 GGRATAATGG AGAAAATGGA ATAATGATG AAATATGTGA ATATATATAG GGACCATATG CATATGAMGG CCGGGGGTTA  
 AATAAACGA AATCTACTTG TACATACTTT ATGGGATTC TGCAGCCCGG GGGGATCCAC TAGTTCTT

SEQ ID NO:84: (Length of Sequence = 313 Nucleotides)

CTTTAACTTA ATGGCAATTA AACTCACTG GCAAAAAA TCACTAGAGA TGTAGTCCA TTATCTTACC AAATAGTGTA  
 TTTTACCAT CTTTACCTA CACCTTGAG TAAGGTGGAA TAGGTTAAG TTACTGGCAT AATAACACTT CATTGAATTC  
 ATGATAGTAT TTAACATGTT AAACTGTTT AGTTGAAAAG TTCACATGCA ATTTATAATT TAAAAATATG CTACATATAT  
 TTCATAAAW TACAATAGGT CATACTARAC TTTGACTAAA ATTAAGAATG TKTTTCTKTC ATAATAATGC AGG

SEQ ID NO:85: (Length of Sequence = 303 Nucleotides)

TGCTCCGTTT ATTGCTCTAT TCAATGACCA CGAGCGAATT ATAAAAAGAC ACCAAATGTC TCTGTCTGCC GTGGGATAAA  
 TATTTAAAGT CAGCAATAAA GTCACGTGGC TCCAAGRTAA TACATGTTGC CAAAGAGTCA TGCATGCCCT CCTGATGGGC  
 TCTCAACACA CGTATGGWCA TGGGAACACA CGCAGAGCAA CACGAGTAT GAACITSTGG GAAGGCTTTA CCACAGTGAC  
 ACAGTAAAT GTCTACGTA GATCTGRGCT GAGTCCCCAC CCAAACCTTG AGCTCCCCCTT CCA

SEQ ID NO:86: (Length of Sequence = 380 Nucleotides)

AAAACAAACC AGCTTTAATA CCAATATAGT TCTCTCTTAA ATACCGTGTT TCCAGGACA AATGCAGGG CAGGCTCTTG  
 GCAGAAAGAG TAGAAAGGAA ATGTGGAACA AAATGGAATG GATGGCCAG GCCAGGGTC CCTGCCCTGG GCACTAGGGA  
 CTGGGCTGCC TCGGGGATGG GGGAGTGACA GCAGCTCCCC CTGGTCCAST TATTGCAGAG GCGTCGGGGG CTCCCTCC

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TCCCCAGGCC TGAAACATTT CTCAGGATTA CTTCTGACCT TCAGCCCCAG CAGGGCCAGG GCCTGGGCTC CTCTGGTCTA  
GGATGGGCCC CTTTGCCCCA AAGGGCCTTC AGCTAAGGCG TTGGGTGGG CGGGGAGCCC

SEQ ID NO:87: (Length of Sequence = 280 Nucleotides)

GCCTTTGCTG CTTATTGCA TCGATGGTGA AAGAGATGTC AGGAGCACTT CTCTGCTGAG GTGGCTGAGA CGAAGAGGAC  
TCCTGCTGCA GCCTTGCCGC ATACCTGGCA ATTAGCCTGT GTTCTTCATC AAGCCGGTTT GAACTCTCAA GCATGCTCCT  
GGTAATAAAA GGAATTCTCTG AGGAGGGGAA AGAGTGAGAG AACAGGGTGT CGTTTCATGCT GGTTCAGGT CTGGGAGGCA  
CGATGTGAGC CAAGTTGAGT GGCTTCTCAG GCTGATCTGG

SEQ ID NO:88: (Length of Sequence = 446 Nucleotides)

CCTGGCTCTC TTACACCCYC TCCCACCCGA GGCTCCCCAG AGATAGCAGA GAATTCGAAG AGGTGCGCCG GGA CTGGAAA  
GAAGTCCGNG NAGGCCGCT TCGAGTCTA CACCCAGCC TGCTTCCAG CCTACAYCCA GACCCAGCTC AGACCTTGT  
GACCACCCCA TCCCTTTCTC CGGCTGGCTG GGTCGGGGG ATCCCTCTCT GTGCTGGCT TCCAGAGGCA GGACAGGCT  
CCTGGTAAGC CCGCAAAGTT GCTGACCTCC TGACTTGGTC TGCTTTTAT TAATATCTGT ATTGCTGATA ACCGTGCTCT  
TGACTATGTG TCCCAGGTCA TGTCCAGGT CATGGAGAAG CCGTGCCAC AGTGACCTT CCCATCTTC TGGGGGGCT  
GCTCTCCATC TGGATCGTAG GAGGATATAG GTGTGTTCTG GACCAT

SEQ ID NO:89: (Length of Sequence = 384 Nucleotides)

GTCCCTCTG GGGACTCTT TTCCCATTT ATTGCTGCTG TGTCCTTAC CAGTTCCTTG CAGGATTCCC TCCTTTTAAA  
ATGCCCTTAA ATCTAGCTTT GCCTTGAGA CCCAGTGGG TGCTGCTCCT GCGTTTCT TCCTGCCAAG CCTGAATCAA  
TGTTTCACT CCAACCTCT GCCAGTTGG CCGCTCAAAG CTGGTGGCT CAAGACTGTW AGCTGGCAG AGCCGCGNGG  
TGAAGGGAGA AGCTCTTGA GCAGGCAGGA TGCCACCGCT GCTTCAGCTT GCCTCCTGCG CCAGCTACCC TTTGGCCCCA  
TTGGGCCCTC GTMTGCTCT CCAGGATTGT ATGTTTCAAG NCTTGCTG TGTTCTTTG TCTG

SEQ ID NO:90: (Length of Sequence = 344 Nucleotides)

TCAAGCTGGA AAGGGCTACT ACCTCATGCT GGAAAGGGCT ACTACCTCAA GCTGGAAAGG GCTACTACCT CAAGCTGGAA  
AGGGCTACTA CCTCAAGCTG GAAAGGGCTA CTACCTCAAG CTGGAAAGAG CTACTACCTC AAGCTGGAAA GGGCTACTAC  
CTCATGCTGG AAAGGGCTAC TACCTCAAGC TGGAAAGAGC TACTACCTCA AGCTGGAAAG GGCTACTACC TCAAGCTGGA  
AAGGGCTACT ACCTCAAGCT GGAAAGAGCT ACTACCTCCA AGCTGGAAAG GGCTACTACC TCATGCTGGG AAAGGGCTAC  
TACCTCAAGC TGGACAGGGC TACT

SEQ ID NO:91: (Length of Sequence = 364 Nucleotides)

GCCCCAGGGT GAGGGCTATG AGGGGTCAGG GGTGAGGTTT CCCAGGACCC TAGTCCTTGT CCCCTTCCCT GTTGCTAAAT  
AAAAGTGAAT AAATACTAAA TAAATACAAC TGGGGCCAG GCGCTCCCTG CCTTCCCCCT CCTTCTGTG ACCCGCAGCA  
GAGGGGGCAG TTTAGATGGA GGGCTGTCTG TCAGCCCCCTT CCATCCACTA ACCCATCACT GCCTCCAGG GCAGGAAACC  
AGGGCAGGGC CAGCTGCGC ATTAGGGCAG AGAGGAGGGG CAGGTCTCAC GCCACAGCC CCTTCCACT TGAGTCTTAG  
CATGAGGCAG CAACAGAAGC TCTCTCTTC TCCAGCTAA GTCC

SEQ ID NO:92: (Length of Sequence = 218 Nucleotides)

ATTTAATAGA AAATTAAAT AATAAATAAT ATGAAACAGA CTGATAACGC TGAGCTGGGC AGGCCAGGC CAGTCTAGTA  
CAAAGTTAAG GAGGTAGGGA GGATGGTGGG GAGGAGGGG GGGACTACCC TGCAGGACGC GGGAGGCTGC TCAGACTGTG  
GTGATGTCAG GAAGGGCCGC ACCTTTGGC ATGGACGATG CACTAAAAA AGAGAAAG

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SEQ ID NO:93: (Length of Sequence = 364 Nucleotides)

GCTTTCAAGG GAACAAAGAA TOGGCCTGGC AGTGCCCTGG AGAAGGAGGT GGAGAGCATG GGGGCCCATC TTAATGCCTA  
 CAGNACCCGG GAGCACACAG CTTACTACAT CAAGGCGCTG TCCAAGGATC TGCCGAAAGC TGTGGAGCTC CTGGGTGACA  
 TTGTGCGAAG CTGTAGTCTG GAAGACTCAC AGATTGAGAA GGAACGTGAT GTGATCCTGC GGGAGATGCA GGAGAATGAT  
 GCATCTATGC GAGATGTGGT CTTTAACTAC CTGCATGCCA CAGCAATCCA GGGGCACACC TCTAGCCCAG GCTTTGGAGG  
 GGCCCACTGA GAATGTCAGG AAGCTGTCTC GTGCAGACTT GACC

SEQ ID NO:94: (Length of Sequence = 423 Nucleotides)

CTTCATACTA GAACTGTCTG CCATCTTTAT TTCTTTGTTT TCAGGAAAAT TGGAGAGAAA AGTATTTCTT TTTTAAAAAT  
 GATTATTATA CTTTAAAGTC TGGGATACAT GTGCAGAACG TGCACGTTTG TTACATAAGT ATACACGTGC CATGGTGGTT  
 TGCTGCACCC ATCAACCCGT CATCTACATT AGGTATTTCT CCTAATGCTA TCCCTCCCTC AGCCCCCAC CCTCCAACAG  
 GCTCCAGTGT GGTAGTGTCC CCTCCCTGTC TCCATGTGTT CTCATGTTC AACTCCCACT TATGAGTGAG GGACATGCAG  
 TGTGTGATTT TCTGTCTCTG TGTACTTTG CTGAGAATGA TGGCTTCCAG ATTCATCCAT GTCTTGCAA AGGCATGAAC  
 TCATCCTTTT TATGGCTGCA TAG

SEQ ID NO:95: (Length of Sequence = 405 Nucleotides)

AACAGCCCC GATCTGCATA GCCTGTGAAA GCCCACGGGG ACATCAGTAA CCTTCTGCAG CCACCATCCA ATGCCATTAC  
 TGTNAAGTGA GACTTGGCCA CTGTAGCCTG GGCTGCTGC AGGAGCTCTT CAGAAAGGCA CATGAGGACC ACGGTTTGCC  
 TCAGTTTCTG GTAAACACA AGGTCTGGAG TGCCCTGCA AAGGGTATTG ATGGACTTCC TGCCAGTGAC AGAGCATGTC  
 TATGCAAAAC AATCTCTCA GTTACGTTCA GCACTTAAGA ACGGCTAATG NCAATAGGAT CTTTAGCAAC TTTTTCACAT  
 CATAGAAGGT GCAATCGCTC ACTTGGGAAC ACTACTGAGA GTGACTTCTC TTTTAAATTT GAGTAGCAGA TGAAAAATTA  
 AAATT

SEQ ID NO:96: (Length of Sequence = 173 Nucleotides)

GAAGACAATA CTGATGCCAG CTCTTTGTAA TTGTGAAATC TGTACCCAAA CCTCTGGATT AGAATCTCCA GTTGTCTACT  
 GTAAATACTG GAATTACAGC AAAGGATATG GGGACTGGGC TGCTTTTCTG TATTGTACAA GCACTATTCT AGATATTAA  
 GAAATTTAAC CGC

SEQ ID NO:97: (Length of Sequence = 337 Nucleotides)

ATGGCGCCCT ACAGCCTACT GGTGACTCGG CTGCAGAAAG CTCTGGGTGT GCGGCAGTAC CATGTGGCCT CAGTCTGTG  
 CCAACGGGCC AAGGTGGCGA TGAGCCANIT TGAGCCCAAC GAGTACATCC ATTATGACCT GCTAGAGAAG AACATTAA  
 TTGTTGCGAA ACGACTGAAC CGGCCGCTGA CCTCTCGGA GAAGNTGTG TATGGACACC TGGATGACCC CGCCAGCCAG  
 GAAATTGAGC GAGGCAAGTC GTACCTGCGG CTGCGGNOGG ACCGTGTGGC CATGCAGGAT GCGACGGSCC AGATTGGCCA  
 TGCTCCAGTT CATCAAG

SEQ ID NO:98: (Length of Sequence = 212 Nucleotides)

TGAAGCCCAA GNAGTNTGTG AAGACAGAGA ATGACCACAT CAACCTGAAG GTGGCCGGGC AGGACGGCTC CGTGGTGACG  
 TTCAAGATCA AGAGGCACAC GCCGCTGAGC AAGCTGATGA AGGCCTACTG AGAGAGGCAG GGCTTTTCAA KGAGGCAGAT  
 CAGATTCAAG TCGACGGGC AGCCAATCAG TGAAACTGAC ACTCCAGCAC AG

SEQ ID NO:99: (Length of Sequence = 26 Nucleotides)

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CCTTTTAAATA ATAATTCTGC TGCTGCTGT GACTAGAAC CCATGCCTAC TGCTTGGGGT ATAATGTAGT AAATGTAGTA  
 AAAACAATAT CGCCCGGGCG CGGTGGCTCA CGCCTGTAAT TCCAGCACTT TGGGAGGCCA AGGAGGGGGG ATCAGAGGT  
 CAGGAGAGCG AGACCATCCT GGCTAACATG GTGAAACCCC GTCTCTACTA AAAATACCAA AAATTAGCCA GGCGTGGTGA  
 TGGACGCCTG TAGTCCCAGC TACTC

SEQ ID NO:100: (Length of Sequence = 333 Nucleotides)

AAAATGCTCA CAGTGGTCTT CTCTGGCCGG TGAGCCTACA GCTGATCTTG TCAGAGACAA ACGTTAGTTT TACTGAGTCA  
 CCCAGAGCCC TGTGCTGGTG CCGTGGGGTT TGTTCATGG GACAGTCTCC ACAATTCTTC TGGGGAAGGG CCACAAATCC  
 CACAGTGTGT CCCAAGAGGG CTGGAGTAGG CGGAGTCCCC AGCAGCTGTG GCATGACCAG CCATCTCTCT CAAAACAATT  
 GTTAACAAGC CTTCTGCAAG TTAAGGTCC ACATGGTAGC CGTGTACAG AGGCATTTCT CTAGGGTGGG AGAGGCTTGT  
 GCTCTACACC AGG

SEQ ID NO:101: (Length of Sequence = 156 Nucleotides)

CTCTGACTTT CCGTGGNTT TAGAGCCAAG CTCAAGGTAG TAGGCCGTAG GGNCTTATTT TATTTTCAAA CCCCCATCCT  
 CAGAGCGCAG ATACATGCAG AGGCTTCTGC CAGGCTACCA CGGGCCCTTA GTGGGAACAG GTTGAGACCA GCATT

SEQ ID NO:102: (Length of Sequence = 331 Nucleotides)

CGAAAAGGGG NNNTATGGCC ATCTTTTATC AGAAAAAGTG ACAAAACGGG AATTTAAAAA ATGAATTTTC NNTCTGACTT  
 TATTINNAAT TACACTTTCT TTTTINNAAT ACCAATACAC TTCTTTGAG GATGACAGTA TTAGGAAATC CAATTNNACA  
 AAAAATACTA CATCTAGTCT GGGGTAGATA TATTTATTTT TGGTAACATA CATTAGTGG CACTAATTAC ACAGTACTA  
 TAAGGTAACT AACATGAAAC CACAGAACTG TAACTCTGCC ACAGCTGCAT GAACTTGGGC TTTTCTGGTT GAGCCCATTT  
 TCAAAAACT G

SEQ ID NO:103: (Length of Sequence = 316 Nucleotides)

AGCCACTGCG CCCACCCCA TTTCGGTGTN ANCTCAGCTC ACTTCAACCT ACCCTCCCA AGTTCAAGTG ATTCTCCTAC  
 CTCAGCCTCT TGAGTAGCTG GGATTACAGG GGTCTGCCAC CACGCTGGGT GATTTTCCTA TTTTGTAGTG AACTGCAAT  
 TCACCAGGTT GGCCAGGCTG GTGTGAACT CCGTCACTCA GCTGATCCAC CGTCTCGGG GTCCCAAAGT GTTGGGATTA  
 CAGGTGTGAG CCACCACACC AGGCCCATAT TTTCTTTTAG ACATGCAGGC AATGTTGGTG GGTGTGTCTG TTAAGA

SEQ ID NO:104: (Length of Sequence = 308 Nucleotides)

GTTTTTCCTG CATCTATGA GATAATCATG TGGTTTTGT ATTGGCTCT GTTTATATGC TGGATTACAT TTATTGATTT  
 GCGTATATTG AACCAGCCTT GCATCCCAGG GATGANGCCC ACTNGATCAT GGTCGATAAG CTTTTTGATG TGCTGCTGGA  
 TTGGTTTTGC CAGTATTTTA TTGAGGATTT TTGCATCAAT GTTCATCAAG GATATTGGNC TAAAAGTGTG CTGTATTCAG  
 GAAACCCATC TCACGTGCAG AGACACACAT AGGCTCAAAA TAAAGGGATG GAGGAAGATC TACCAAGC

SEQ ID NO:105: (Length of Sequence = 355 Nucleotides)

GGCCTTCCTC AATATGTAGG CGCCACTTTT TCTCCCTGTG CCTCACCTG GTCACCCCTC TGTGCGCGAN ATCCCACTGT  
 CTCTCTGGGT GTCCAAACTT CCTCTTCTTA GGAGGACACA AGTCAGATTG GATTAGGGCC CACCCCAATG GCCTCATTTT  
 AACTTAATCA CCTCCCTTTT GTTGGGCTT TTTAACTTAA TCACCTCTTT AAAGACCTTA TCTCCAACCTA AGGTTTCATT  
 CTGAGGTATA CTGGAGGTAA AGACTTTAAA ACACGAATTT GGAGGGGACG TAATTCAGCC CATAACAATA ACAATAATGA  
 CATCTTACAA CTTACTGCCA CCACCAAGCT TGCTG

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SEQ ID NO:106: (Length of Sequence = 355 Nucleotides)

GGATGAGGTC GCCGGGATCG TGGCTGCACG CCACTGCAAG ACCAACATCG TCACAGCTTC CGTGGACGCC ATTAATTTTC  
ATGACAAGAT CAGAAAAGGC TGGTCATCA CCATCTCGGG ACGCATGACC TTCACGAGCA ATAAGTCCAT GGAGATCGAG  
GTGTGTGGTG ACGCCGACCC TGTGTGGAC AGCTCTCAGA AGCGNTACCG GGCCGCCAGT GCCTTCTTCA CCTACGTGTC  
GCTGAGCCAG GAAGGCAGGT CGCTGCCTGT GCGCCAGNTG GTGCCCGAGA CCGAGGACGA GAAGAAGCGC TTTTAGGAAG  
GCAAAGGGCG GTACCTGCAG ATGAAGGCGA GGGAC

SEQ ID NO:107: (Length of Sequence = 273 Nucleotides)

GTGTCTCTTT TAAAGAAAAC ATACTTTATT TTGGTCTAAA TTGTGAAAAT ACCCAAACA TTTGATAGAA ATTGAAGTCT  
GTCAACAGTG TTATTATATC TAAGATCAGG ACAGTTCCTT GAGATCATAC TGTTTATTA CTAAGTTTGG CCTTGTGTTT  
ACAAATGTAA TGTTCATATT TATTTGAATT TTAAGATTGG TTAATGTTA ATGAAAAGCA ATCCAATTGT TANTTTTATG  
TAGTGCTTTT TCTCTGTATG CCTTAATTTT ATT

SEQ ID NO:108: (Length of Sequence = 359 Nucleotides)

ATTTTATTTT CTTACATCGA AGAAAATGTT AAAGAGTATC TGCAGACACA TTGGGAAGAA GAGSAGTGCC AGCAGGATGT  
CAGTCTTTTG AGGAACAGG CTGAAGAGGA CGCCCACCTG GATGGGGCTG TTCTATCCC TGCAATCTT GGAATGGAG  
TGGATGATCT GCAACAGATG ATCCAGGCCG TGGTAGATAA TGTGTGCTGG CAGATGTCCC TGGNTCGAAA GACCACTGCA  
CTCAACAGC TGCAGGGCCA CATGTGGAGG GCGGCATTCA CAGCTGGGCG CATGAAAGCA GAGTCTTTG CAGATGTAGT  
TCCAGCAGTC AGGTAAAGTG AGAGAGGCCG GGATGAAGG

SEQ ID NO:109: (Length of Sequence = 360 Nucleotides)

TTTATNAAAG CAGTTAAACT TAGCATTAAA TAACACTCTT TAAATGGTAC ACCTATGAAG CAAGAGTTAA ATATAAACC  
AGTCTAATCC TGTACACTTG TGATTAAATG TGACAATCTT AAGTGTCTCA CTTCCTTCCC ATTTACCAAT TCAGAGAAAG  
CCCGTTTCTT GTTTTCTCTT CACCATTTG CCTTGGCATC ACACCAACCC TGCTCGGGC TTCAGCTGCA GATCCTCCCC  
AGCCCTCTCT CCCAGCTGGG CTGACTCCAG TCCAGCCCC AGTCTCCACC AACTGAGCAG CGTACGCAGG GTGTGTCTG  
GCTTCCAGCA TCTACCAACC CTTAGAGCA ACTT

SEQ ID NO:110: (Length of Sequence = 364 Nucleotides)

TCTCAGAGGG GCTCTGGGG TCATTCAAGG GGGACTTCTA GCTTCTCTCT GGAACCTTT GTCCAGAGCA AAGCCAGGT  
TCCAAGGTCC CCACGGCAAG GCTGTGGGT GCTGGCAGCA AGAGGTACAC AGCAGTTCTC CCAGCTCACA GCAATGACCT  
CAGATCTCCA GCAGCAAGGG CGCACTCTC GTGCCACAA GGGCCTTGCA GAAATNCTCC GGTCCCTGGG NCTCCCCGG  
CAGGAGGGG GGGGCTCTG CCTGAGTGA GGCCAGAGCA CTAAGCGGCT TCAGTCACAT GCTTTTCAGG TGAATCACTC  
CAAATTCAGT GAGGAGGGCC ACGACAAGGA AGTTCAAGTA GAAG

SEQ ID NO:111: (Length of Sequence = 455 Nucleotides)

TTTTTTTTT TATATTTTAA ATGGAATTTA TTCTATCAAC TGCCTGAGAG GACACAATGG GGGAGGGGCT TCGGACCACA  
GCAGGAGCCC GACTGCCCC CTTGAGGGCA GGGAGAGCCT GACCCATTG GCCCAGGCC TGGCTCTGTA ACCATTAAAC  
TCTTCCCCCA ACTAACACCA ATGAAAACAC CATTCCAGT GACTGGGCTG TGTGTTTGGC TCTGTGACAT GGGGACCCCT  
GACCCTAGGG GTCTCGCTG AGCCAGACCT GAGGGACCCA CCCGCGTAGG ATGGAGGAAG GTTTAGGCCT CCCTTTTGCC  
AGCCAACGCC GGGGGTGGG GCAGACCTG GGAGTGGGCC TTACAGACCA GCCACAGTA TTTCTTAGGC AATTGACAC  
ATTTTATTAC AAAACAGTC TACATTCATT CCTAAAAGG TCATTTTCAG TAAAA

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SEQ ID NO:112: (Length of Sequence = 398 Nucleotides)

CTGATCTGAC AGGAGGTGTA GGTGAGGCAG TAATGGAAGT SATGGGGAAC AGCTGTAAAT ACAGATAAAG CTTTACTCAC  
 TCGCCACCCC ACTGCTCATC TCCTGCTGTA CTGCCAGTT CCTAACAGAC AGCAGACAGC TACTGGTCTG TSGCCCAAGG  
 GTTGGGGACC CCTGACATAG ACTAAACAAT TCACAATGTT TATATTAAAC AACTTATTCC AAGTTTCCAT TTTAGACTCT  
 GGAACATCTG ACATGGTGAA TOCACAGGTA GTAAATSGGA AGGGAGATAA CAGACAACCTT GACGGCCGTG GAAGACGCAC  
 TGGGGGGGCA CTGGTGACCG GTCTCGGGAC AGACTTCACA TCTOCAGACT GGCACAGTGG GCTCACACCT GCCTCCCA

SEQ ID NO:113: (Length of Sequence = 444 Nucleotides)

ATCAGTGTCA GTGTCTAACA GAAGGGTCTG TTAAGGATGC TTCGATTIA ACCAAAAGAT TAAGCTTCAG AAACAATCTA  
 ACATACTCAA AGGAGCACCA AATTATCAAC CGGCTACAAG GATGCAAAGG ACCTAAACAA CAGATGTCAA AGGGCTTGTA  
 AAAACTGGAG CCAGCAACCA TTCCACTTGA AGGAATCCAT CTCAGGGAAA TGCTGGAATC CACACACAAA AGCAGGTGTG  
 CAAATAATCA CTGCAGCAGC CCTTCTAATA GTGAACAACA GAGGCAATCC AAATATCCIT CAACAGGGAA CTGAGTAAAT  
 ACCAACTATG GGCATATCCA CATAAGGCTC TCTGCAGTCA TTAAAAGGA TTGCACTTAC ATGCATGTCT GCCATGGAGG  
 TCTTTTCAGG CAATGGTTCC ACTCGGAAGG GCAACCACCA ATTA

SEQ ID NO:114: (Length of Sequence = 472 Nucleotides)

TCGGGCCCCA ACGGAGACCT GGGGATGCCG GTGGAGGGCG GAGCGGAAGG CGAGGAGGAC GGCTTCGGGG AAGCAGAATA  
 CGCTGCCATC AACTCCATGC TGGACCAGAT CAACTCCTGT CTGGACCACC TGGAGGAGAA GAATGACCAC CTCCACGNC  
 GCCTCCAGGA GCTGCTGGAG TCCAACCGGC AGACACGCCT GGAGTTCAG CAGCAGCTCG GGGAGGCCCC CAGTGATGCC  
 AGCCCCTAGG CTCCAAGAGC CCCCACCGG GACCCAACCC TGCCCTCCCTG GGGCTAAGCT CTGGCCTGGG GCACTCACCC  
 CCTGGCTTAG ACAACTTCTC AAGGGCTTGG CCTTCAGGGG ACCCTTGTGG GTCTTGCCIT GCTGGGGCCA CCTTTCTTG  
 CTGGGGGCTT CCCCCTTGGC CTACCTTGGG GCCAAGCCCC TACCAACTTT GGATTGCCIT CTGGGGGGCC AA

SEQ ID NO:115: (Length of Sequence = 293 Nucleotides)

CTNGGGGCCA TGTGGCTGAT TTCCATCACC TTCTTCCAT TRGCTACGGC GACATGGTGC CCCACACCTA CTGCGGGAAG  
 GGTGTGTGCC TKCTCACTGG CATCATGAGA GCTGGCTTTA CCGCGCTCGT GGTGGCTGTG GTRGCTCRCA AGCTGGAGCT  
 CACCAAGGCT GAGAAGCAG TGCACAACCT CATGATTGAC ACTCAGCTCA CCAAGCGGT AAAAAACGAG GCTGCTAAGC  
 TTCTCAGGGA GAOGTTGGCT CATCTACAAA CATACCAGAG CTGGTGAAAG AAG

SEQ ID NO:116: (Length of Sequence = 448 Nucleotides)

TTTGAAAATT TAGAGGATAT TTATTCTCA GGAAGGTGCA CAACAGCTGG CAGGCACTGC TTTCCCTGCT CTAGGGGATT  
 CCTCTCTCCT TTTCCAAGAA ATCCCCCTC TTCTTAGAAG TGCCCATGGG AGGCTGGGAT GTGAAAAGAA ACCATACACA  
 ACACTCCAGA GCCTTAAAAA AATAAAGCAA CAACCTCCTC CACACGAATA CACTTACAAA ATAAATAGAC GGATAAAGA  
 GAGGCCACGT GCCTCCCATC CCGGCTGTAG GGCTGCTTGG GGATAGTGGG GCTGGGTGGC TOGGTCCAC TTCTCCACG  
 CAGGATGATC CAAAGGCTAA ATGGGATGGA AGGGCCCTGG CTTTCAGAGA GAGGGTGGGG CAGGCCTCTC CTGGTACTCA  
 GCAGGGAGGA CACTGGGGCA CGGTAGGGG TCCAAGGGCC ACTTAATA

SEQ ID NO:117: (Length of Sequence = 551 Nucleotides)

GAGACGGAGG CTCGCTCTGT CCCCCAGGCT GGAGTGCAGT GCGAGATCT CAGCTCACTG CAAGCTCCGC CTCCCGGTT  
 CACGCCATTC TCCTGCCTCA GCCTCCGAG TAGCTGGGAG CCAGCGCGCC CAGCCTAAAA AACTTTTCAA GTCAATATTA  
 CTACGATTIA ACATTAGAGT GTGGACATGT GATTTAATCG CTATAGCTAA AATACGTCAA ATATACGTTG TCATGTGCTT  
 GAACATGATG CTAACCTGA CAGGATGAAG GAAAGTAATA TTCTTTCAGT GTAGTTCAGG AGAGCATTTG TTTTCTTTTC

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TACCAATTAA CCCATCATTG CTTTTAAACA ACCATCTGAA GGAGCAGAGA GGCAGGGTAG AAGACAGAAG GGGGTCTATG  
TGGGTACTAA AGATGTTTCT GTTTTGTAAT ATTGTGTGTG TGTGGGTTTA TGGTTTGCTT AAGGGATCAA AACCTGGAAA  
AAATGGGATT CCAGGAATGG CTCTGTATT TTTGCTGGGT TCCAGCTTGT AATGCCTACT GCCTTGGTTC A

SEQ ID NO:118: (Length of Sequence = 426 Nucleotides)

CCCCACCCCA AAATCAAAAC TGAAGGTAGT GTCAGTGTAT ATATGGNGTC CCTTGTGCTG AAAGTCAAAG CAGCTTCATT  
TTGGGGCCTC AAGAGCTCCA GCTCTGGGCT CTTCACTCT AAGCCCATGG GCAGTGCCCG CCCAGTGGTG TGTATAGATC  
GGAGGCTGAG GGCCTCACCC TTAGCTGAGC TGTGCGGTGC TGGGGAGCCT GTGCAGGAGG GTACAAGTAG GAAAGTGCCA  
TCTGCATGGG AAGAAAAATG CAGCGTCTT GGTAGTGCGG ATGGGGTCCA GGAGACCCAG GGAGCTTGCC CAGAGGGACC  
TGAGTGGCAT TCCTGTAGGA AAGCAGCCCA GATCTTGGGG CCGTAACGGA TGTTCGTGAA GTTTTGACTT TGAACCACCA  
GGTCCCATTG TTAACAAGCT TCTTGA

SEQ ID NO:119: (Length of Sequence = 434 Nucleotides)

TTTTTCGGTT AAAAAGGCCC AAAACTTTAT TTAGTTTTCA GGGAAATATA AGATGCATGT AAACATAAAA TACAAAACAA  
AACCCTAATC TTACAGTCTA GAAGCATGCC AAGACAGAGC ATTTTCTGCA GACCAAAGAG TCCCGTCAAA GTGATAAAGG  
ACACCTGGAA AGTGGCAGGC CAAGGGGCTG GTCCCTTCCC CAAGGGCACT GCATTTTGTGAT GATGAGATTA AAAACAAACC  
AACTCCACTA TTAATAATGC TAGAAACATG GGATAGTTTA GCACCACCAT TGATTCTGGC AAATATTTC GCACTCACAT  
CGACTGCACT GAGTTTAATG TCCTTTCTCC AGTTTCTCTG CTGAGTAGGG AAGGAGGGAA ACCTGGGCGG AAGGGGCTCC  
TCCTGACCCC ACAGGGCCAC TAGGAGCTTG GAGG

SEQ ID NO:120: (Length of Sequence = 276 Nucleotides)

AGGAAGTGT AGCAAATGCT ACCATGTGGA ACACTCAACT TTATTTGCTT TATTTATATA TTAAACAATT CTAAAGTATT  
TACTTCTTGC TTTGACAAAA AATGAAAAAT ATAGGGGCAC TGACTGACTC CTCCTTAGGA GAAAAGGGTT ATATGTACAG  
CTATGGAGAG TTACGGTTC CCCTTAACA AAGGCAAATA TTAATAAAAA AGGGCTTCAT CGGTCAAAAA AGGGCTAAGA  
GCTGCAAGCA TTTATTCACA CTGTACATCG GGCCCC

SEQ ID NO:121: (Length of Sequence = 554 Nucleotides)

ATTTCTTTCC TTAATCATAT CTGATGCTGG GATGTGGGTA ACCCAAACCT GAAGGCAGCT GCTAAATCTC AAATGCTAAA  
AAAACTAGC AATTTTGACA TCAGTGAGTC AGATCAATAC ATCCTCTGGG GCTGATTTTG CTTACAGTT AGGATGAGCC  
ATCTCTTAAG CTGCAGGCTC AAATGGGATT AACTGAACTC TATACCTGGG ATGGGCCATG GACTGAGCTG TCCATGCAGA  
AGGACCAGGC TGTCCATGCC TTCCCTGCCC TTTTACTCAC CACTGCACAG CAGCCCCAGT GGGCCTACTG CACATGTCTA  
GGAGAAATCA CTCTAAGAAA ACCAACAGGA ACAGGCTTTA GGCAACAAGA GAGTCTCAC TGCATCTCCT CCCACGTCAG  
AACTTGAGTA CTGGGTCTTT GCAGCTCAGA GCATTCTCC CTTCCCTTTC CTGCCGAAA GGCTGCTT TTCTGAGAC  
ATATGGCACT CCATGCTGCA AGTTTCAAGC AGATGCAGGT TCTTATGGG CTTTTTGCTC AAAGAGCTTT GGT

SEQ ID NO:122: (Length of Sequence = 238 Nucleotides)

CACCTAAGCA GGTAGACATC CGCAAAGTCA GATGCTTTCC AACATGACAC CTGAACATCT TCCTTTATGC AACACCCAAA  
CATCTTGGCA TCCCCACCCC AGGAAGTGGG GGGAGGAGGT TATGATCCCT GGGCGCTTCG GCAGAATGGA GAGCTGAGGT  
GTCCCTCCCC TGCTAGTCAC CTACCAGGTG TCTGAGCAGC TGCATGCTCC CTGGCTCAAG TGGGCACTGT ACCTTTTG

SEQ ID NO:123: (Length of Sequence = 244 Nucleotides)



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ATCCAGGCTT TCATTCTAG CCAACCTCA AACACCACCA ACTACAAAGA AAATTTAAAA GTCTAATTTG TAACCTTCAG  
ATAAGTATAA ATTAGTTTTT TCTAGGCTTT CATTATTTGG CTTCTTATAC AATCTATCTT GTAAAGTACA TTCTCTAAA  
TTTACATTAT CTAAAATTAA GGCIAAGCAT TATTTAAATC ANTTAATCAT ACAATATTTT ATGGCAATAT GCACATATTT  
ATAA

SEQ ID NO:124: (Length of Sequence = 330 Nucleotides)

CTCAGCGTAT CATAGGOGTG CTCACCTCC TCCCCAGCT CCGCCCCGC AGGCAGGTGG TGTAGGATAG AGTGGTGCAT  
GAAAGGGGGG AAGCCCGAGG GGCCCGCTGG GAAGGGTGCT GCCCCGTAAG GGCATCCCA CTGGCACTGT GCCTCANCTG  
CCGCTTCTCG CTCAGCTCA GCCAGTCGCC GCGCTGCTC TTCAATCACT TGTGTCCCT TCTGCTGCAG AGCTAGTTGG  
CGCTTTGGTC TOGATGTCTT GCAGTGIGGC TGCCAGGTG CAAGGAAGGC TGCCCGGTGC CATTCTGGGG GTGAGTAGGA  
GCGCTCTTTT

SEQ ID NO:125: (Length of Sequence = 281 Nucleotides)

CCCTCTCCC TTGGTTCTC CATTACCGA GCCACAGTAT TTCTAAAGC TGGTGGCAG CCTGCACCTT GCTTATCTT  
GGGAGACAG AGTTTGATC CTATTACAAC CCATAGTTTT TGCATAACCA TGGTGAGAGG AACCATCCTT CCAATCCCA  
ACCTCAACCA AAGCTTAGAA AAAGTGCCAT CTTTAACCTT TCAGAATCAC TCATAAGTAA ATCTATAGC AGTCTCTGCT  
AATGCAAAT TCAATGTGTG CCGCTTATT AGGTGACTTT T

SEQ ID NO:126: (Length of Sequence = 266 Nucleotides)

CTTTAATGA TGTGGTCTG GTGGGATTAA TAAAGGGAGA TGGACCCCTG GNAAGATGCT TTCTTMAACC ACAACCCACA  
CATTGGGTCA CCATTTCTC TTCTCTCTCC TTCTGTGGGT GCGCGGAGAC CTGTAGGACC TTCCCTCCCT TTAGGGTTCT  
GTAAGGCCCC TTNTCAGTCC TCAGAGTCCA TTCTCTCTT GTGCTGAGGG CCTGCAGTGG GGACCATATA CTCTGGTGC  
TCTTAGTTG CTGTGCGTC TGTTTT

SEQ ID NO:127: (Length of Sequence = 435 Nucleotides)

GTCTGGTCT ATTCAATTTG TAGTGGGAG AAAAGGAATG AACCGTGAAT ATGGCAATTC ACGTGACGT GTGATAATTT  
AGTTTGCTAT GAGTTTTCAC TCTTAGGTAA AACCTAGTTA TCTAATTAA TAATTAGTTA TGGATGATAT AGTAATTTTT  
TTTTTTTTTG ACTGCGTCTC ACTGTCATTC GGGCTGGAGT ACAGTGGCTG ATCAGATTC GGTGCAGCCT CGACCTCCCT  
GGGCTCAGTG ATTCCTCTGC CTCAGCTTCC CAAGTGGCTG GGGATTATGG GCATGCACCA TCAATGTCTG GCTAATGTTT  
GGTGTGTTTT TTTATAAAGC CAAGGGTTTT GCCCATGTT CAAGACCCCG GGGCTGGTCC TTGAACCTCT TTGGGGCTTC  
AGGCAAGTCC TCCCACCTTC GGGCTTCCC AAGT

SEQ ID NO:128: (Length of Sequence = 471 Nucleotides)

TTCCCTTCCC AAGGACTCGA CTTGAGAACC GCCATGTACT CGGAGATCCA GAGGGAGCGG GCAGACATTG GGGGCTGAT  
GGCCCGGCCA GAATACAGAG AGTGAATCC GGAGCTCATC AAGCCCAAGA AGCTGCTGAA CCCGTGAAG GCCTCTCGGA  
GTCACCAGGA GCTCCACCGG GAGCTGCTCA TGAACCACAG AAGGGGCTT GGTGTGGACA GCAAGCCAGA GCTGCAGCGT  
GTCCTAGAGC ACCGCGGCG GAACCAGCTC ATCAAGAAGA AGAAGGAGGA GCTGGAAGCC AAAGCGGCTG CAGTGCCCTT  
TTGAGCAGGA GCTGCTGAGA CGCAGCAGA GGCTGAACCA GCTGGAAGAA CCACCAGAGA AGGAAGAGGT TCACGCCCCC  
GAGTTTATTA AGTCAAGGGA AACCTTCGGA GATTTCCACA CTGACCAGCG AGAGAGAGAG CTTTAGGGCC A

SEQ ID NO:129: (Length of Sequence = 186 Nucleotides)

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GCCTTTAACA TCCTCTGCCA ATRACTGGCC TCAAATCACC AGTGGAACTT TTTCAAAAAA TACACCATTG GCTCTATGTA  
 GTTCTACTGA TCTRAAATAT CCACGTGTGG GCCAGGAGCA CTGGCTCATG CCTGTAATCC CAGCATCTTG GGAGAGCGAG  
 GAAGGAGGAT CATTTRAGCC CAGGAG

SEQ ID NO:130: (Length of Sequence = 307 Nucleotides)

ATAAAATACT TAGGAATATA CCTAACCAAG AAGGTGAAAA ACCTCTCCAA GGAAAACTAT GAAACACTGC TGAAAGAAAT  
 CATAGACTAC ACAAATACAT TTCATGCTCA AGGATGGGTA GAATCAATAT TGTGAAAATG GCCATACTGC CAAAAGGGAT  
 CTWCAAATTC AACGGTATCC CCATYAAATA CCACCATOMT TCTTTACAGG NTTCGGAAAA GGAATTCATA AATTCAATG  
 GGACCCAAGA CGGGGGCCGC ATAGCCCATG GCGGGCTTAG CTWAAGGGA CAAATCTGGG AGGCCTT

SEQ ID NO:131: (Length of Sequence = 184 Nucleotides)

CCAGGTTGGA TGGAGTGCAA TGGCAGCATC TGGGCTCACT ACCTCCC AGGTTCAAGC AATTATCCTG TCTCAGCCTC  
 CTGAGTAGCC GGGATTACAG GCACGTGCCA CCACACCAG CCAATTTTIG TATTTTTAGT AGAGACGGGG TTTCACCGTG  
 TIAGCCAGGA TGGTCTCAAT CTC

SEQ ID NO:132: (Length of Sequence = 270 Nucleotides)

GCNGGAGGGC GTCGAGGGCC AGGAGCTATT CTACACGCCC GAAATGGCTG ACCCCAAGTC AGAACTMTTC GMEVAGACAG  
 CCAGGAGCAT TGAGAGCACC CTGGACGACC TCTTCCGSA TFCAGACGTC AAGAAGGATT TCCGGAGTGT CCGCTTGCGG  
 GACCTGGGGC CCGGCAAATC CTTCGNNNC ATTGTGGATG TCCACTTTAA CCCACCACA GCCTTCAGGG CACCCGACGT  
 GGCCCGGGCC CTGCTCCGGT AGATCCAGGT

SEQ ID NO:133: (Length of Sequence = 529 Nucleotides)

CTTGCACTAC ATAGCATTGT TATTACTGAT AGCTTTATAA ATCTGCCAAA TAACATAGAA TGTAGCCTCA AAAGGATGGT  
 CGAGGGTTGG CAATCTTTCT TTCTCCACC AGTGGTGTGG AGCAACTCTG TGCCCTTAAAG AGGGCACCAT GGAAAGAAAC  
 AAAAAGGAAT CTCTTTCAAA ATGCTGGAAA TIAGGCTTAG CTCACTACTT TCAGGATAAA GACAACTGCA TCTAATTAAG  
 TCCACTCCAC ATTTCTTTGG ACTCTAAGTA TTCTGCACCT GAAGGCTAAA TTGAACGGC TCAGCCCTAT CTTTTTTGCC  
 ACATCTTTAA TTACAAATCT ATTTCTTCTT CCTTTTCAAT ACTTCTCTTC TCTTAAGTAA GAAATGTGGG AAATGAGACT  
 GGCAGTTTGG TTGTGTTGCA TGTGGGTGTC CATTAGGGGT CTCATCCTAT GSCCCTTTT GGAAATGTTG CCTTCCTACT  
 ACACACCTGG GAGGTTTCCC CAAGGCTCAA CCTTTTGTCT TCAGGTAAA

SEQ ID NO:134: (Length of Sequence = 437 Nucleotides)

GACGGTGGCG ACGGTGCAC CGGGATGTG TCCTGCCACC AGAGGAGGTG TGCGTGGCGG GGAGCAGAGG GGCCTTGTIT  
 CCCAGGTGAA GGTGCGGCTT CTTCACCTTT AGAGGTGCGT GTGTGGGTGG GGGTGCTTGC TGTGAGGTT TATGCTGTA  
 ACTGACAGCT GTCCCCAAG CCATGCTGGC AGTGTGTAGG TGTGTTGCCG GCCACCGCAG AGGAATCCTC TGGGCTTCTG  
 TGGTTCAAGT GGGGCCACG GCAGAGCTCC ATGAGTTGCT GAGCAGCCAG CCCTTCAGCA TCTCCTGGST TTTGGCAGCA  
 GGAGGCGTCC CCTGTGCAA TTCAGGGGGC CGTGGGGGCT GGGGGCACTC GTAGCAAGGT AAAGGAGCCC CTGCTCAGGC  
 CCTTGTTTGC TCCCCTTTCT TGCAAGAGGG GTAGACG

SEQ ID NO:135: (Length of Sequence = 534 Nucleotides)

GGCATTTGTC TGGTGGGTGT GTACGCTCC CAGAAGACTG AATTTATGGT AGGATCACTC GCAAGGCCTT GTGAAGGAGT  
 CTTACCTAAA ACAAAGAAA TATCAGGAC TTTGTGTGAC TATTTACAAC TCAGTTTAC ATTTAAATTC AGGCAGTGT  
 AATATGCCAA GGTAGGGAAT GTGCCTTTT CAGAGTTGCC CAGGAGCTCC TGGCTGGGAC ACGGAGAGGC AGGTGTGGCG

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TAAGGCCTCA CTCGCGCTG TGAAGGTC TCATCACACA GAAGCAGCCC TGCCAGCCT GGGTCATTG CTGTCCGCTT  
 TTCTCTGTGA CCACAAGCAG CCCTGAACAA CCAGTATGTG TCCTCTTTCT CCAGATAGTG AAAAAGGGTG TCAGATAAA  
 CCCACCTAAG TGAAATGGGC CATCCTCTAA ACTGGGGTAC CTCACTGCAC AGGTCTAGG TAGGCTTTCC ACTTAATCTA  
 ACTTGAGGCC TACAGGTACC CTGTAAAGTT AGTGGGGCTT GTCCTTGATT GTGG

SEQ ID NO:136: (Length of Sequence = 279 Nucleotides)

CAGTTTGGAC AAAGTAGCAT AGTGACTTIN TTCCTACANT GACTTTGGGA GAAGTINGCA GTTCTGGCA AAGTGACGCT  
 GGGCTGTTTG AAAAAGGCAA GCTTAGCCTA GGCTGCCATC TTAAACATT TCGAGGCTGT AGCTTCCTCA GGATCCTTTG  
 CCTGTGGTCT GGTGGCCGGC AGTGCCCGT CTAACAGCTT TTAAGTCTGC ACTTAGTGCC TGAGCACCTA TGGCTGTGAG  
 AGATGCTAGA TACAGAACCC TGTCCTGTAC CACGTGGGG

SEQ ID NO:137: (Length of Sequence = 518 Nucleotides)

CAAATATTTA ATGGAGATCT TCCTGTGTGG TCTGTATAT GTCATCCGT TTCTGGGTGG TTTAGGAGAA TCTGTACTAT  
 TTCAGCATGT CCTCTOCAG CAGCAAAATG AAGAGGAGAA CTAAGTTGTC CATTAAAG GTTGGATTG CACTTTCCIT  
 TCTCTAACAA TATGCGAGTG GCTCAACTT TTCCATACCA GCATGCATAA TGAATGGGTG CCCAGTGGTC ACTATCTAAC  
 TGGTTGACTG AAAATCTTTC ACTGAGAAGA CGGCTTAGTA ATTCTGAATC TCCTTCACAG GCGCTTCGGT GGAGAGGAAA  
 ATCATCTACC CACTGTGCTT CCTGTCTTC TGTGACACTG CTCATGCTTC TCTGCCAGTT TTTCCGTGTT AGGGTATTTG  
 GATTTTTGAG TAGTCTGGAG CTCTAGACC CAAGTATGGA TTTATTACC ACTTATCTAC CCGATTGTGA TACTGAGGAT  
 CCTATCCAAC AAAGGGTGA AATCCAGGAT CCGCCTTC

SEQ ID NO:138: (Length of Sequence = 266 Nucleotides)

GATTGCAGGC ATGANCCACT GCGCCAGTC GAGTGGTAAT ATGTTMAAG GAAACCTTTT TCTGAGCAGG TCTCAAAGA  
 GAGGTAAAA TACTGAGTAG ACCATMCTGT AAACAGATGT MCTGTATYC GGGCTTTCAT ATTCCATTTA TAAAGCACAG  
 GCAGAGCTCA GAGTAGATTT AAYGTAACTC TGAAGGGCAC TAGGATTTTC AGAATGGTAA ATAAGCATTG GCTTCACCTT  
 AAATYCAAAT CTGCATTGGG CTGTGA

SEQ ID NO:139: (Length of Sequence = 341 Nucleotides)

ACCTCGCTCA CGCTCTGAC CACGACAGG CAGAGCAAAG GATGCGGAG TTGCCTCTGC TGCCCATCTA AGGGGACGTA  
 GGCAGAGAAG CAAAGGCCTC TGCTCTCCCT CCATCCATCC CGGTGTGCTG GCCCAACGG AACAGGAGTC CTTCAACTAT  
 TGCCTGCCAG AGACCCAATT TTAGGGACTG TAGTCTGCAT CTGGATGAGC TGGGCTGTAG ATTGAAGTCT CAGAAGCAGG  
 GAAGGTGGA AGGGGTAGGG TCCAGAGCC CATGGAGTTA TTGCTGAGAA GATATGCAGG GGACACATTT CCCAGGGGCA  
 GAGTAGAAGC CTTGGGCCTT G

SEQ ID NO:140: (Length of Sequence = 234 Nucleotides)

GTGAAGGGAG TTGCAGAATC AAATTGCTAC ATAGGCCAAA CAAAAAGAA GGCTTTTCA AAAACATTA AATTACATG  
 CAGTCTCAGA GACTATTTAG GCAAAGTTCA AGTTAGGAGC TTTTAGGATG TGGGANIAAA ACTTTAATKG GAGGGGAGGG  
 CTGCTTCTG GAGAAGGAAG AAGCCAGACT TGTTAGACAG TACTCTTAAC TCCTAGCCCA GCCTAGCGTG CCT

SEQ ID NO:141: (Length of Sequence = 354 Nucleotides)

CAACTCAGGT TAGCAACTGC AGGAAAACIT TCTTCATTT CACTGAATTT TAAAGAGAGA ATCTGTCTC TATTTCTCAG  
 AGAAACTTAG GTGAAAAGTA AAAGAGAGGC AAAATCTCTT TCCTTCATGA GATACTTTA TTTTATCTC TTTCTCTACT  
 CATGTGCTTA ACTGGTGAAG TGATTCTGTA GAAATAGATC CTTCTGATTC TGCACTCAT TTCTTATGG CAACTACAAC

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AGGAGGAATC CAGCTGGAAA TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCGGAGCGC CGTGCTGGGC  
TCACTCACTC TGGGCCTGCG CACTGGGGTT GTGG

SEQ ID NO:142: (Length of Sequence = 373 Nucleotides)

GTTTTTGCAA CACTTTTTTT TTAAGTTAAT GGGTGCAAAA TCCCAAACCA GGATATGTGT ATGTCGTGTGT GTTTATGTTT  
TTNATTGAC CCTCCCTCT TTCAACCTAC CCCCTTTTAT ATCTAATGTA GAAAAAGCGA AATTGAATCT GGAAGCAAA  
CTGTTGTATA TAGTTGCGGT AACATCATG AAGAGAGAGC CGGCTGTCC AGTTGTTTTT GAGACAGAGT CTCCTCTGT  
TGCCAGGCT GGAGTGCAGT AGCATGATCT TGGCTCACTG CAACCTCCCC CTCCTGGGT TTAGGCGATT CTCCTGCCCTC  
AGCCCTCCCA AAGTAGCTGG GATTACAGAC CCGTACCACC ACAACTGGGC TAA

SEQ ID NO:143: (Length of Sequence = 262 Nucleotides)

CGCACCTCG GCCAGAGGCG GCTGCAGCAG CTGCTMCTT TTCCCTGCCG CCGCTCTCC AGTCCCTTTT TTAATTACCA  
CTCCAMCTGC TGGGAACGGG CGAGAAAGAG GAGGAGCGA GAACTCCCA CCGACCCACA GAGGGAGCAT GATTTCGGCA  
ACTTCACCTA TCATTCTGAA ATGGGACCCC AAAATTTTGG AAATCCGGAC GCTAACAGTG GAAAGGCTGT TGGAGCCACT  
TGTTACACAG GTGACTACAC TT

SEQ ID NO:144: (Length of Sequence = 384 Nucleotides)

GGAAAAGCGG GACCCAAACA GTGGTGCTGG GGAAATTTT CCTGTCCCC TTGGAAGGC TGAGTGGGTG ATGCAGCACA  
GGAACAAGGC TTGGACGTCA GAGGTCTCAT CTTCACTGTA ACAAGCATA AAGGACTTGG GGTGAGCGT GTGNTGGGC  
TCAAGTGACC ATGCAAGTCC TGTCACTCC TTCTAAGAC CCCATCCTTC TCCAGTCC TCCACAAGAG CTACCTCTT  
CAAAACAATA ACAGAAACAC ATCAAGCTTG GCGTCACTG AATTCAAGTT CTGATTTCTC CCGTACCCC AGCAACAGTG  
CCAGTTTGA TTGTGACACT TTGACCCAGC ACTTGGTTTT GAATGTTCTT TTGGCTTGT ACCG

SEQ ID NO:145: (Length of Sequence = 324 Nucleotides)

CTACATGGAA TCATAAGTKT TCCTAAAAA GGAAGACAGA TTGAAGACA GAGGAGGAAG GTGATGTGAT GATGAAACA  
AGGGGAGAAA ACSCAATGTG ATGTGGCCAC GAACCAAGTA ATGAGGACAG CCTACAGAAG CTGGTCAAGG CAAGGAAACA  
GATTCTCTC TAAAGTCCCT GGAGAGGGCC TGGCCATGCT GACACCTTGA TTTTKTCCA GCAGAACTC ATTTTGGATT  
TCTGGCCTCC CAGAAAAGTA AGGGGTAAAT GTGCTGTTTT ATGTCAGTT TKGGTAATT TGTTATGTC AGCCATCGG  
AAGG

SEQ ID NO:146: (Length of Sequence = 355 Nucleotides)

TTTGCTCCT TCCTTCCTA TCCAAGCAAG GGTGTGGTGA CAATGACCTG ATCGGGGTTT AACGCGGCT CTGCTGCTC  
ACCAGACCTG GGTGCTGAG CTCGACCAG CCTGGGCAGC CCAACCCACA GGAAGTGGG TTTCATAGCT GGTCTTCAG  
GAAGGGGTGG AGGCTTTGGG AGTGGCAGCT CCGCGCTCC CACCACCCA AGCCAGAGAA TGGGGCAAC TTGTATGCAT  
GGCTTATCTC TAAATTACTA ATCTGCTTCG GACCAGACTC ATCTCTACAG TATAGAGTTA GAGTTATTGC TTCTATGACA  
GGTGTCCAG AAGCCCTGGG TGGCTTTAA GTCTG

SEQ ID NO:147: (Length of Sequence = 337 Nucleotides)

CAGTTTCTG AGTTCCCGTG TGCTAGACTG GCCAGAAGAG AGGGTCTGGG GCTTGGTCAC TCGGCCACTC TCTCTGTTT  
CTGGCCTCTT CTCCCTTAC TCCGTCCAG TCTGGTTTTG AGAGCAGGGG CTGTCTACA GCACCTCAGG GAAGGGAGGA  
GAGATACCTG CTGCTTCCAT TGCTTTTCCC TTCTGGAGT CGATGCCCTT CTAAGGGTGG GAGCTGCTCC TTGCAGGGGC

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GGGTCAGTTT CCCAGGCCAT GCGGGGGTG GGCATCTATG CTAGGGCTGG AAGCTGAGGC TGGCCGCCAA CTGTGGGGCT  
GGGGTGGGGG TGGGTGG

SEQ ID NO:148: (Length of Sequence = 278 Nucleotides)

GGAATCAGAT GCTCAGGTGT CCAAGCAGGG ATAAGGACAG GCAAAATAAA TAACCGCCCC AACCCCCATC GTCACCTCTGC  
TGCAACACGA CACAAAGGTT TAAAGATCTG GGCCCAAAGA CTCTGGGACC CTTCAAGCAA GTCAGGTGGA AGAAGGTTTC  
CCCACCCCCC ACCAGGCCTG TTGTCCCAG GTTGCCCTAG GATGGAGGCA GTTCAGACCC TGGGTCACTG ATGCTTGATA  
GGAAGATCTT TGATATCAAT GGCTAAGCT CTGCTCAT

SEQ ID NO:149: (Length of Sequence = 368 Nucleotides)

TTTTTTTTTT GTTTTCAACA AACTTTACTA AATAACCCCTG GAAAGGCAAT GAAOGATCTG ACAATTTAAG CTCTAATGAT  
TTAAAGCTCA GCTAGAAGAA AGTGAGGCAT GACATATACT GTCAACGGAG GGTGAAGGAG GCAGATTCTT GGAAATGCAA  
TGATCCACA CATTTGCTTC AAGGAGAAAC CTGCAGACAT ATTTTCAGGT CTTGCTAAGT AACAAGTGT TATTTGTAAT  
CAATACATTT GGGGAAAGTC TGCTATGTAG CTAAGGTCAC TGTGACCACA GACCAACAGA TGGAAAGGAA AAAGGCACTG  
GACCAGCAAG GAAAAATACA TCCCCATCCT CAAAAGAATT TTAAGGTG

SEQ ID NO:150: (Length of Sequence = 367 Nucleotides)

TTGTGAAATG GGCCTGGGTA GATAAGGAAA AGAACCTCCA AGAGGTAAAG TGATTGCGG ATTTGCCTAA ATTATACAGA  
AGAGTCAGCA CCAGTGCCCA GGCCTTCTGA TTCTTAGTGC AGTAAACACT AAGCACCATC ATTCCATTTC ACCACACTCC  
TGCTTGCTG TTGTCTCAG CTAAGAAAGC CTACCCCTGA GTTACCTCTT TCATCTTAG AGCCTTCTG CTCGCTGTCT  
GCCCCCTGC GATGGGGACT TCTTTGGCCC TTCTACCCA GCCCAGCCTC TGCCCGTTTT CTTCTCCTT TCCACTGCGG  
CTGAGCTCTT TTCTCCTTC GAGAAGCCTT TCCTTCATCT TTCTGG

SEQ ID NO:151: (Length of Sequence = 366 Nucleotides)

CCCAGCGGGC CGCTCCCTC CTCTCTCCTC CATAGGTGGG GGTGTGGGC CTTCTTTTTT TTTTGTCTT GGAGGGCAGT  
TAAACTTCTC CATTTGCCCTC TCTCTTCAACA CCCAAATGCC AAAGGACACT TTCTCTTTCT TTTGTGGGTA GTTGCAAAAA  
AAAAAAATTC CTATGGGTTA CTGCCACTTT TAAATACITT GTAACTTAAA GGCAAAGTAG TATGTCACTG TTTCTTTTCC  
CTGTAGTTTA CTTTGTAGGT TAAACATCTT TCCATGCTTT TATTGGTCAA ATACAGTTCC TYCTTTTGTG CAATGTTAAT  
CCTAATATGG ACCATTTTTT CTAATGGGAT TACCGATTTT TTTAAA

SEQ ID NO:152: (Length of Sequence = 269 Nucleotides)

GTATTCTGG CAAGTGCTTT CAGGGCCCTC CAGGGTTTGG CTGGTCACCA TGGAGGGGGG GTTCAGGTGC TGAATTTAGG  
GACCCAGCA TCTACAGGT TTCCCTTCC ATCTTTCCCA GTGGCACTGT GTCTGAGCAG GTGTGCCAG GTGAGGTGT  
ATCCACTGTG TCTGAGCAGG TGTGCCAGG TGAGGTGTGA TCCACTGTGT GTGAGCAGGT GTGGCTGTG CAGGTGGAAG  
TGGGGATAIN TGGGCACCTG GGTGCCATT

SEQ ID NO:153: (Length of Sequence = 260 Nucleotides)

TTTCAGGATT TTATTTAAAA TTTATTGTAA TGGGTCCGC GCAAAGGAA GGGGTGGAGG GTGGGTGACA TGCAGGGGAC  
ACAGGAACAN GATCCACATG GCCAGGNC CACTTCTTC TGTCTGGGG AAGAGGGATG AAAAGACAAG ACCAGGGCTA  
NGAGCTGGGG TGAAGAGGG GAGGGGNAAC ACTGGCTGCA TTCCCNAC CCCANGANGC ACCTATAGGC CCTGGACCCA  
TGGGTACCC TGGGCCCTAG

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SEQ ID NO:154: (Length of Sequence = 405 Nucleotides)

TGGAACCTGT GAGTGGGAC CCATGATGTA TGGGTCTCAC CTGACTTGAG GTGAATTTTG GAGTGAAGGG CCTTGAGGTC  
 AGCTCCAGG TCGTCTGTC TGGGCCAGGC CTGGTTTTCAG CAGGGGCTGA AGGATCCCAG TCCACCTGTG TGCATGTCAG  
 GGCTGGCCG GGAAGAAGCC AGCAAAGTCC CCCGTGTCCC TTGCTGAGTA TTCTGTGACA GACAAGCCTC CATTAAAGCC  
 ACAGCAGTGC TACCCACCAC ACACACCTTG CTGGCCCCGC CACCACTGCT GGCTTCAGCC CCTTNAGCAG CCCATGGNTT  
 AGCAGACCCT CAGATGTAGG TCAGTGGCCT TANCITGINTC TATCCATGCT GTTAAACTCC CTGCTTCCAA CTGGGGGTCA  
 CCACT

SEQ ID NO:155: (Length of Sequence = 40 Nucleotides)

CCATGATCTT ATTTATTACA TCTAGTTTTT CTITATACCT CTAAAAAAA GTGCCTTTTA GATTACAGC TTGTGCTTCT  
 AAAGCAAAGG TTAACACATC ATGCCCCAAA GGAAACAAG GTAAAAAGGA AGCTGCCATA TAAGCTCTTA AAANTGTAT  
 GTTACAAGGT TCTAAATCT CTTAGCACT GGTGGTTGG TAGATTGTAC GACACTGACA TGGTCTTGG GAGGGTCATT  
 TATCTGATGG TTGGAGCAGC ACCATGGGAA AGCTGCCAG ATGGTCTACT GAAGTCTTG GCTGTGCACA GAATGGGCCC  
 AAGGGCCAGN AATTCATGAG TCCGGGAAC TTTGGNGTC CTTACTCAAT CTCCTTAGTG CTAAAGNTT AGAGTCTCAA

SEQ ID NO:156: (Length of Sequence = 443 Nucleotides)

GTCCTCTGGA TTGCTTCGTT GGTGCGAAC TTTAAGAATG GCAAACCTGTG ATTGGNTCCG ATTAAGACAA GCTTTGTAGT  
 TTTCTTCGTG TAAACACCAA ATCCCGCTG GGCCATGAGG TAGCAGAAGT GGGCCGCATC CAAGAGGCC CTTGAAGCCA  
 GAGTGTGCCC CATGGTAGCC ATCGTCTGG ACTCGACGTC CATGTTGTG TTCAAGTTGG ACAAGACCAT GGCAGGTTGC  
 GGCCTCCAAT CTCGCCATT CTGCTCCA CAGCAGTGG ACGCGGCAGG CATCCGTCCG GACATGAGCT GGTAGACTGT  
 CTTAGAGGG TCGTTGATTK GGGAGGCTTT TTAGCAAACC TKGCTCATGA CTCGGCGTG TGTCGGCTG TTCCATCTTA  
 CTTCAGAGTA GCAGAGCGTG ACCCCACAAG GCCATTCTTA ATT

SEQ ID NO:157: (Length of Sequence = 383 Nucleotides)

ATTGGAAGG GTTTAAACG GAGTCGGAAC CTGAGTAGAT TTCCAAATTT TACAGCCAGG ACTACAGAAG TGCATCATTC  
 TAGAATGTGT AGACCTGAGT AGCTTATACA CTACAGAGCA CTTTGCTTAT TTGAAAGTAA TTCAGCAACA GGTCACTTTG  
 GGATATAACC TGAACCTTTT TTGGAGTGG GGTGGGTAGA CTACAGTAGA CACAAGGCTT GGACATGCAG ATGCTTAGGG  
 GATTAGCGTT TTTCAATAAT TGTCTGTTT GTCAGTTCAT TCCTGTGTGT TCTTACCTCT ACAAAGGTAC ATTACACATT  
 TTAGTTTTT TAGTGACCTT TAACCATGTT ACTTGAAGCA TTTTGAATA TAAAGCTATT TTA

SEQ ID NO:158: (Length of Sequence = 241 Nucleotides)

TGGTSTGTGG CTCAGCTGCA GCGCCAGTA AGTGGGTSTC CAGGGGAGTG GACAAGCAAT TCTCCTGTCA TTGCAACTT  
 TCTTCAGGAA CTCAGATAAA GAACACTTGG ATAACGATGA TCCCTGTAGA GGGATTTCAT CTGTACCATC ACACATGGAA  
 GAGGAGTTTC TAGGTCAGGA AAGGCAGCTN CTAAGCTAAA GGTTTCTTGG TCCCTTNGTC CTGGCATGCC TTAAGGAGGG  
 G

SEQ ID NO:159: (Length of Sequence = 224 Nucleotides)

CTGTCACTAA TGGCTCACTA AAGGGCCAGC AGTTTAAATT ACACAGGTTG CACTAAAAGC TGCAGCTTTG GCCAGGCAAG  
 GTGGATCAGC CCTATAATCC CAACACTTTG GGAGGCGAG GCGGGCAAAT CACCTGAGGT CAGGAGTTCA AGACCAGCCT  
 GGCCAATATG GTGAAACCTA AGCCTCTACT AAAATTACAG AAATTAGCCG GTCGTGGTGG CACA

SEQ ID NO:160: (Length of Sequence = 377 Nucleotides)

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GGAGGCTGAG GCGGGCGGAT CACGAGGTTA GGAGATGGAG ACCATCCTGG CTAACACAGT GAAACCCTGT CTGTACTAAA  
 GATACAGAAA ACTGGCCGGG CGTGGTGGTG GGTGCCTGTA GTCCAGCTA CTTGGGAACT CGGGAGGCTG AGGCAGGAGA  
 ATGACCTGAA CCCGGGAGGC GGAGCTTGCA GTGAGCAGAG ATTGCGCCAT TGCACTCCAG CCTGGGCGAC AGAGTAAGAC  
 TGTCTCCAAA AAAAAAAAAA ATAATAATCA AAGCTCTTGG ATTTATAGTT TGGTCCCCAG CCTTGTPTTG ATCTTTCCIT  
 TATCCTGTTT TATTGCCATT TACCACGTCC TTTTGGAAC ATCCCTTTCA ACTGCTG

SEQ ID NO:161: (Length of Sequence = 273 Nucleotides)

GCAGCGCGC CGGGCGAGGA GGCGCAGGG GCGAGGAGGG GGCGGCGGT GGCGACCGC AGGAGGCCAA GCCCCAGGAG  
 GCGCTGTG CGCCAGAGAA GCGCCCGCC AGCGACGAGA CCAAGGCCGC CGAGGAGCCC AGCAAGGTGG AGGAGAAAAA  
 GGCGAGGAG GCGGTGGCCA GCTCCGCGCT GCTAGGCCCC CTTCGCGCGG GCGCGCGCG CCCCAGGAGC AAGGAGGCAG  
 CCCCAGCGGA GGAGCCCGCG GCGCGCGCAG ACT

SEQ ID NO:162: (Length of Sequence = 286 Nucleotides)

TTTTGGTCAA ATAAATCAGA GTACTACAAT CATCAACAT CTGATTCATT TAACATGTGA GCATCTATAC CTGCCATTT  
 GTGTGAATAT TCAGTATATA TCTCATACCT ATTCTCATGC CTTCAITTTAT TGTGGTTATG GCTGTAGATA TGGAAAAAC  
 AGTAGCTGAG ACAITTTTAT TATGAATAT ATTATACCTT AATCAATCAG TCAGAAAATG CTTAGGAAGA AGAAATGCAT  
 GATTGTAAAT GCATGATTTT AACATGCTAC CGGCCAACAA AAGTTG

SEQ ID NO:163: (Length of Sequence = 342 Nucleotides)

TGCCCAAGGA AGACAGAAC TGGAGAACCG TCAAGGCAGG AACCCACAG ACTGTCCCTT CCAGCCACA CTCGCCACC  
 TCCTGGCCCT GTCCAATTC TGAGCCAAGG CCTCCCGAG GCAGAAGTTG CCTGGTCCTC TGTCCCCACA GTGACCTGAC  
 TGGGGTGAG GGAGAAGGAG GAGAGAGCCC ATGTGTGGTG TGTGTGCCCC TGAGAACTTC GTGGTGAAGT CCTTTGGGAG  
 CCCCAAGTG GCCAGAGGCA GGGGTAGCTG AGTTCTGGG AGACCCCTT TTTTCCCCA RGTTCGCCAG AGGGCAACGC  
 CATCAGTAGC AGTGTGGTGT TT

SEQ ID NO:164: (Length of Sequence = 392 Nucleotides)

ATTACCCGGG CCGGCCTCC CTAAACAGA TCTACGGACC TTAACCGACG CCATGCTGAG GCTCATTCCA TCCTGCRGA  
 CGTATGCAGA GCGCTCACT GCTGCCATGG TGGAGTTCTA CACCATGTTA GGAGGAATTC ACCCAGGATA CACAACCTCA  
 CTATATCTAT TCACCCGTC AAATGACTAG GTGGGTGAGA GGCATCTTTG AAGCGCTGAG ACCTCTGGAG ACCCTGCCTG  
 TTGAAGGCCT CCTTCGGATT TGGGCACATG AAGCTCTGCG TCTCTTCCA GATAGACTCG TAGGGGATGA GGAGAGGCGT  
 TGGGACTGAA TGAGAAGATC GACACGGTTG CTCTTGAAGG CACTTTCCCT AACCTTCGGC AGAGAGGAGG GC

SEQ ID NO:165: (Length of Sequence = 406 Nucleotides)

GTATAATTA TCTGTTTTA TTATTTATG TTTATCTCT ACTGTGTATA ATGTAGAAAT TAACTTTTAC CATAGGTATA  
 TACATATTGG AAAAAGCATC TTATATACAG GTTTTGTTAC TATCTGTGGT TTCAGGCATC CACTGGGGGT CTTGGAACAT  
 ATCCCTTGCA GATAAGAGGG AACTGCTGTA TCCATAGAAT AAAACACCC CATCTTGAAG ATAGGAGGTT CTGTAAATTG  
 GGATGGGGTC AGGGAATCTG AATTTTAAAA GTTCCCATG TGATTGATG CCCAGCCAAG GGCTGGGGAC CACTGTCTTG  
 AAATATAATG CTGAGGAAGA TACTGTCTTT GGATTTTCCT GGTAAATCCG AGTGCAAATT CTCAGGCTGG AACCTTATGG  
 GCCTTG

SEQ ID NO:166: (Length of Sequence = 453 Nucleotides)

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GAAACTTTTG CCATGGGTCA GTTTTATTGG AAGTTCATTT TCCTGAATGT TTGGAAGAAA GTCTAGTGAC TCAGGATAGC  
 ATTTCTAATT TCACAGAGTT ATTTTCCGT TATGAAACAC AGATTGOCCT TGAGGTCTCC TGTTTCTACT ACTGCCCTC  
 ACTTTTATGT GGGCCTCCTC TTTCCTTGT TTCIGGAGAA CCITTTCTG TCATTTCTG TTTTAATTTT CAGCAGTTTT  
 TTTTCTGTGT GAGTGAGGCT GTTTCCTAGC AGGGAGGTCT GGTGGTCAT TTTCAAGTTC ATCAGGGCTT CATCAGGGCT  
 TGTCCACTTC AACCTTACG CTATAGGNCC CTNTGCACCA TCTGCANTCT TCAAAATGTG CCCACTGGTT CGTTCCCATG  
 GANGGCTGT TGGTAATTG GCCTTTTAGG GGGGGCCATG GAAGGAGCAA ATC

SEQ ID NO:167: (Length of Sequence = 285 Nucleotides)

TTTACTCTTA AAAGTGTAC AACAGAATCA TGGACTGACA CAGGTAATGG CTGAGCCATA AGCAAATCGA GAAGTACAGA  
 AATGTCCAC CCCAAACAGC TCGGAGTAC ACATCACACA GGGCCTCTGG TCCCGGCTT CTCAGGTGCT CTGGAGTGG  
 GGATCCTTTG AGGGAACTCT GACCACTCCT GTTGTCTACC TAGAGAGCAC GCCACTTGGG CCACCTACCC CCAACCTTTG  
 GCCAAGGAG TGAAAGGACC TGAACCTGT CGTCAACCTC AGCAT

SEQ ID NO:168: (Length of Sequence = 327 Nucleotides)

CTAGAGGGCA CTCTGTATAC CCGTCAGCTC CTGGAGCCAT TCATTCTATG CTGGGCAGAC AGGCTGTGAG AGGACATGGG  
 GGACGGTGA AAGGNTCCAA AGACGAAGCT GINGTTTATC CTTGTGGTT TTACACAGGG AATGATGAAA CATTGAAGGG  
 GTTTAATAAG CTTTCTCTAA AACATTTTCC CCTTAAACAG GCTGGCACTA TGTCGAAGCT GCCCAAATTT GAGATTGATT  
 TACCAGCTGC GNCTAAGTCA ACTAAACCCA NGCCTTTCCG AAAGAGACAT CGCAANTGGC TTACCCAANG TANTGTCCCG  
 TTTTCAG

SEQ ID NO:169: (Length of Sequence = 346 Nucleotides)

GGTGCTATGG AGAGCCGGCC GTCTCCAGG GGTGAGCTGG GGAGGCTTCT GCGGTCTGAG AGTCCCGGCG ATGGCGCCAG  
 TTCCCCAGCA AACCCCTCC AGAGCTGCCC CCGGATGCAC AGACAAGGAG GGGCTTGGG AGTGACTTGA GGCTGTGACG  
 GGRTCGCCCT CGGTGTGGC AAGTGAGTCC TCTGTGGCCA AGAGGTCAGA GTCGTCCCTG AGGCTGAGTC GAACACAGAC  
 CCGTGGCCCT CATAAAATTA AACATAAAG CACAAAATG GCGCAACCA GACAGCATTG GCTTTGAGAC AGGCAGGGAC  
 ACGGGGGCCC CTTGTGTG ACCTGT

SEQ ID NO:170: (Length of Sequence = 398 Nucleotides)

TTGACCTCAA CTTACTGAGC AATGCCGTAG CTATGGAATA GAAGCATTTG TTGCACTCTT TTTGTGAGCC AGGCCCTGTA  
 GGAGGGATTG TGGATGGCAA AACCTCAGGT TCTGCCCAA TCCTCCCTT GGGGCTGGA GGTCTCTAG TTAATTGGCA  
 TTCCGGTCT TAAGGCCACT TTTGGGTAGA GGTTTGGCAA GATGGAGTG TCCAGACCTA TGATCCTCTA AGAAGTTTAC  
 CTTTTAAAA CAGCCACCA AATGGTGGT GCGTGGGGAG CAGGTGTGG TGAAGGGACT GGGGTGTCT GGCCATKGC  
 ACGTACCAGA GGAGACTCTG TGAGCCCTCT CCCTGCTGA GGGACACTTA ACTTTTATAG CACTACATAG GGTCAACG

SEQ ID NO:171: (Length of Sequence = 321 Nucleotides)

AGACAGCATC TGGCTCTGTC ACCCAGGCTG GAGTGAGTG GCGCAATCTC GGTTCAGTGC AACCTCTGCC TTCCAGGTTT  
 AAGTGATTCT CCGCTCTCAG CCTCCCAAT AGCTGGGATT ACAGGCATGT GCCACCATAC CCAGCTAATT TTTGTATTTT  
 CAGCAGAGAC GGGGTTTAC CATGTTGGC AGACTGGTCT CGAATTTCTG ACCTCAAATG ATCTGCCCAT CTAGGCCTCC  
 AAAAGTGTG GGATTATAGG TGTGAGCCAC TCGCCTGGC CCTTGGGTAA ACACTTCAA TGCAMCCAAC CATTAAGGT  
 A

SEQ ID NO:172: (Length of Sequence = 293 Nucleotides)



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GAAACTTATA GTCTTGCCCTC CCAACCTTCT GAACACTCCA GTAGAAAAT CTCTCGCCT ACCTTTATCA CCCCAGACC  
TACTAGCATT TCTTACTCTC AAAAAAATC TTTTCTGAAA AATCAAGACA GAGTGCAAAC AATCAGCATA ATTTTATTAT  
GACARAACCTT TTAAATTTTA TCCCCCTCTC TGAGAGKICT GCTAGGACTC CTTCAGATAA GTGAAAAGA AAKTTTTTAA  
AATTTATTCT CAAATCCGAA TTCCAATCTG TATAAAAAGG GCGATTCTCC CTC

SEQ ID NO:173: (Length of Sequence = 282 Nucleotides)

GCTTGGTCCC GTTCCTCAGG AAAAGGATGG ACCTTCTCTT CTCTCAGAT GGTCCCTTCC ATTCCCCTGA AACCTGCATG  
AGAGCTCCTA ACATGTTTCT CCAATGCAAT CAAGCCTAGA CTCCAAATGT CCTCCAGCT CACCTCCATC TATGCATCTC  
ATCTCTGGAT TTGGTGATCA GACTCTATAT TGACAGTAGG ATCTCAAACC CTGCATCCAT CCTTCCTCCA GCAAGCCCTG  
CTAGCCACAT GAGGAACAAG TTTCCGTGTC TTCATGACTT CC

SEQ ID NO:174: (Length of Sequence = 353 Nucleotides)

CAAGAGGTGG GAGAGGTAGG GGGCAACTAC AGCTCCCCAC CAGCCCCACC AGGGGGAATG GACCCCTCCC TGCTCCTGC  
CCAAGTGGCT CCCCCTGTAT TATGGGGGGG ACTTTGTGCA AACTCTGCCC CGAGGGGGTG GGGAGGGTGG AGGGTGAGTG  
TGAAATGGCA GCGGTTGGGG CTGGCAGCTG TGCTACTGGG CACTGGGGGG CTGTAGGGC TCCAGGAGGA GGGCCGAGAA  
GGTGTTGACC TTGTCTGCCC CCGCACCTC ATGGGGTAAC AGCGGCAMIT TCACGATGTG GAAGTCTCTC ATACAGGTCC  
TCCAATCTGG TCCAGATACT TGGCCTGGGT TCT

SEQ ID NO:175: (Length of Sequence = 394 Nucleotides)

GCCCATGCCC TTGTGTACAT AATCTCTAAT ATTTATATAT ATTGATATAG AATTCTCTCT ATAATATATG TCATAGAATC  
TCTCTTGGGC CTGGCGTGGG AATGTGACAT TAAGAAAACA TGCTAAGACT GGCCAGAAAA ATGGATATTT CCCAGACCTG  
GAGGATGGTG TGTGGGATGT ATAGGTGAGG TCGTGGAGAA GATAATAAAC TCATTCCCCA AGATACCCTC TTCAACACAA  
GGACAAGAAG GAAGGTGTGT GGTGGGGGAG GGGACAATGG AGGGGGAGGA GTGGAAGATT TGGATTTTCA TTTAATAAAG  
TCAATTGAAA AATGAAAGTG CACCCCCCT CCAAAAACA GGAGATTCAT TTAGCAAGAG CCGTTTCATT CACA

SEQ ID NO:177: (Length of Sequence = 381 Nucleotides)

ATTGGGACGG GCCCCCTCT GAGGCGACGG ATCGATAAGC TTGATATCGA ATTCCCTGAT NTTTTCTAGT GTTATGGTTT  
TCTCCCACTC CAATAACTWT TCATACCTKT GGCTKAGIT TTTCCATCTA TAAATCATG TGCTAAATAA TTAACATCA  
TCTCTATCAT TGTCACTA CACAAAGCTT CCAGCCTGGG CAACAGGAAC CCTGTCTCTA AAAAAATAC AAACATTAGC  
CAGGTGTGGT GGTATGCGCC TGTATTCCCA GCTACTTGGG AGGCTGAGGT GGTAGGACTA CTGGGGCTTT AGAGGTCAAG  
GCTGCAAGTG AGCTGTGATT GCGCCACTGC ACTCCAGCCT GGGCAACAGG GCAAGACCT G

SEQ ID NO:178: (Length of Sequence = 443 Nucleotides)

GATTTTATTC AAACACAGGC AAGAACAATG ACCTTCAGAG CTGGGTAAAA ATAATAAGTT AAAAGCATGG TTAGAATTTT  
AGACAATCAG ATAAAAAGTT TGAAGGAAGT GATTTCCCT TCCTCTCTA ATTGATTAAT TCAACACAGC ATAAAAATAA  
TTTGATCTA TAAAAATATCC TTGTCCAC ACAATGAAC TGGAGGTGGC CCTAGGATTT CCTGACTAT GCACAATGCA  
CACAACTAC ATGTCCCTCC TCCCAACTT TTAAGGCAAA AATGGTCTG CATCTCAGG CAGAGGGTGG GCTCATGCCA  
GCAGTCAGCT GTGGTCAAGG AACTGGGGG TCGTTTYCT CCACCGAAAG ATGCCTGCTT TGGGTCCACT TTGGGCGCGG  
GATCCCATTT TATTTCTAG CCTGTGCTC ACCACAGGA AAA

SEQ ID NO:179: (Length of Sequence = 325 Nucleotides)

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TGGGGGACCA GCATTGCTCC CAGCTGAGGG GCGCGTCTTC CTCACCACGT ACCGGGTCAT CTTCAAGGGG ATGCCACGG  
 ACCCCCTGGT TGGGGAGCAG GTGGTGGTCC GTCCTTCCC GGTGGCTGCG CTGACCAAGG AGAAGCGCAT CAMCKTCCAG  
 ACCCTGTGG ACCAGCTCTT GCAGGACGGG CTCCAGCTGC GCTCCTGCAC ATTCCAGCTG CTGAAAATGG CCTTTGACGA  
 GGAGGTGGGG TCTTACAGCG CCGAGCTCTT TCCGTAAGCA GCTGCATAAG CTGCGGNTAC CCGCCGGACA ATCATGGCCA  
 ACTTT

SEQ ID NO:180: (Length of Sequence = 213 Nucleotides)

GAGCATGCCC CCGGAGTCCC CAAGATCCTG GTGGGAACC GCCTGCACCT GGCGTTCAAG CGGCAGGTGC CCACGGAGCA  
 GGCCAGGCC TACGCCGAGC GCTGGNCGT GACCTTTTTT TAGGTCAGCC CTCCTTGCAA TTTCACATC ACAGAGTCTG  
 TCACGGAGCT GGCCAGGTTC GTNCTGCTGC GGATGGGAT GGACCGGCTC TTG

SEQ ID NO:181: (Length of Sequence = 219 Nucleotides)

AGCTTTATCA CATTATACAC AACATAGAA AACAGTGTIT CAGAAGAGAA GCAAAGGCCA TTGGCTTCAA ATATTTATGC  
 AACAAAGAAA ATGTTCTCAG CCTTAAATG AGCACTTGIG ACTTGTCOA CAGTGAGATA ACTAGTCAAT GGAAGAGTTC  
 AACACTAGAG CATGTATCTC AGTCTGTCT CATATTGCTA TAAAGGCTS CCTCAGACT

SEQ ID NO:182: (Length of Sequence = 451 Nucleotides)

GTCTTACTCT GTTACCCAGG CTGGAATGCA GTGGTGAT CATAGCTCAT TGCAACCTCT GCGCTCTAGG CTCAAGTGAT  
 CCTCCACCT CAGCCTCCG AGTAGCTGG ACTACAGTA CATGCCACCA TGCCAGCTA ATTTTGTAT TTTGGTAGA  
 GACGGGGTTT TGCCATGTTG ACTAGGCTGG TCTGAACTC GTGAGTCAA GTGATCTGCC TGCTCGGCC TCCCAAAGTG  
 CTGGGATTAC AAGCGTGAGT CATGGTGCT GGCCTAGTIT GCTCTATTT TTTTTCATC TTTGAGTTT CTAGGCCACT  
 GGAACAGGC TGCAAGCTC AGAGTCCACA GCTGTAGGC TCATGTGTC ACCATCAAAA AATAAGGTGA CGAGAGTCTT  
 GGGTTTCCA GTGTACGGC AAGAGGGTT ACTGCTACG GGTACACACA G

SEQ ID NO:183: (Length of Sequence = 444 Nucleotides)

CCAAGTTGAC CCGCCGAACC ACCGAC-GGA AGAGTGAGTT CCGTAAACT CTGAAGGATG ACCGGAATGG AGACTTCTCA  
 GAGAATAGAG ACTGTGACAA GCTGGAAGAT TTGGAGGACA ACAGCACACC TGAACCAAG GAAATGGGG AGGAAGGCTG  
 TCATCAAAAT GGTCTTGCCC TCCCTGTAGT GGAAGAAGGG GAGGTCTCT CACTCTCT AGAAGCAGAG CACAGGTTAT  
 TGAAAGCTAT GGGTTGGCAG GAATATCTG AAAATGATGA GAATTGCTT CCGCTCAG AGGATGAGCT CAAAGAGTTC  
 CACATGAAGA CAGAGCAGCT GAGAAGAAAT GSCTTGGGA AGAATGGCTT CTTGCAGAGC CGCAGTTCCA GTCTGTCTC  
 CCTTGGAGA GCACTTGCAA GCAGAGTTG AGGCTCAGCA CCGA

SEQ ID NO:184: (Length of Sequence = 399 Nucleotides)

GGCAGAAAGA GGAAGGAGAC AGTGCCAGGA GGAAGAAGGA AGGAGTCCCT TAGCTCTCTT CATTGTCCCC TTTACTTCTT  
 GCTATCTTCT TCTCCTCTT TCTCTCTCT TGCCINTATG CCGTATTTT TGGCAATAG ACAGGCTGCT CTACCCAAGA  
 TCAGAACTCC AAAACCACTC CCACCCCTGA AGGTGGGAG GGTCTTAGCA GCGCTGGTG GCTGCTGTG CTCAGSTCTT  
 CAGCTCCATG GGAATAAAAA ATGGCACCTT GAATCTCTAG GATTTGTCA CTTTGGAGT ACAGCAAAGT TCTCTTCTC  
 TGTCCCCC GTTGTGCTCT CTTGGGTTA TAGGACATGG TAAATATTTA TTACTTTCAG GGAACCAAGT TTTTATTAG

SEQ ID NO:185: (Length of Sequence = 263 Nucleotides)

CAGAGACACT GGCCAGCTA TTTTCAGCAG GGACAGAGTC GAGGCTCACT GGGGATGGCT TCAGAGGACA CTGAGGCCCC  
 TCTCAGGGAG GGCAAGGCAC AGATACCCA AATTCCACCC CAGTCCCAA AGGTCTCCA GCGGGGCTGT CCACTCCATG

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TCAGCAGAAG GCTCTTGGGC GTGTGAGGGA GGGTCTTGGA GAACTAAGCG AAGGAGGCAA ACGCCAGGGC  
CCCTTGCAGGCACC ATGTGCACCA CTT

SEQ ID NO:186: (Length of Sequence = 343 Nucleotides)

GTTCGAATAG CTGGTTTTAT TCTCAGCACA AAAGGGCCCT GTGTAAAAAC CAGAAGGATT TTGTAAAAATA TCAAAATGAA  
TATTTGGCCT GGAGGTTGGA AAGTGAAGCA AGGCTGGACA TAGAAAAAAA CTGATCAGTA GTTATTCAGG ATATTATTTA  
GGATAAATGA AATAGGAACT TAGGGGCATC TCTTACTTTT CTACAGGTTT TTATCTGGGT CAATGAAGAA ATTGTGTTTA  
TCTTGCTGCC CTTGCATCAG GTTTTTTGCA CTAATGGAAA AAAGCCGGCC GAAAAACAAA ACCCAATCCT TTCAGTCCTA  
GCTTTTACAT CTTGCCCTTG CAA

SEQ ID NO:187: (Length of Sequence = 229 Nucleotides)

GGTGCGGCTC CACCCCTTCC ACGTCATCCG CATCAACAAG ATGTTGTCTT GTGCTGGGGC TGACAGGCTN CAAACAGGCA  
TGCGAGGTGC CTTTGGAAG CCCAGGGCA CTGTGGCCAG GGTTCACATT GGCCAAGTTA TCATGTCCAT CGGCACCAAG  
CTGCAGAAC AGGAGCATGT GATTGAGGCC CTGCGCAGG CCAAGTTCAA GTTCTCTGGC CGCCAGAAG

SEQ ID NO:188: (Length of Sequence = 284 Nucleotides)

CCAGCAACTC AAATTCACCA CTOGGACTC CTGCGACCGC ATCAAAGACG AATTTACGCT ACTGCAAGCT CAGTACCACA  
GCCTCAAGCT CGAWTGTINAC AAGTTGGCCA GTGAGAAGTC AGAGATGCAG CTTCACTATK TGATGTACTA CGAGAKGTCC  
TACGGCTTGA CCATCGAGAT GCACAAACAG GCTGAGACCG TCAAAGGCT GACGGGATTT GTGCCAGGT CTTGCCCTAC  
CTTTCCCAAG GAGCACCAGC AGCAGGTTTT TGGGGGCCAT TGAG

SEQ ID NO:189: (Length of Sequence = 215 Nucleotides)

GGAAGGATGA GAAACAGATT TCTGCTCACT TCATGGGCTG RCCTRGRATT GACGATGGTR CAAACCCAAG ATTATCTTCA  
TGTAATTTAT GAAGATTATG GAACTGCAGC GCATGACATC GGGGACACCA CGAACAGAAG TAATGCAATC CCTTCCACAG  
ACGTCACTGA TACAACCGGT CGGGCACATC TCKCGGCCA TGCTGCCGTT GGTGC

SEQ ID NO:190: (Length of Sequence = 153 Nucleotides)

TTTCATATGG AAAGAGCTAG TACAATCACA TATTTGAAAG GAGAAACAAT AGGTACTGAA CCGGAGGGAA AGGGCGAGGG  
TGAGTGTGCC AGCACCGGCC TGGTGAATCC ACGATTGGT TTCCCATCCA AGGGTAAGTT TCCCAAATA CCG

SEQ ID NO:191: (Length of Sequence = 316 Nucleotides)

GTATTTATAC ATTATTTTAT ATATGTATAT TTAATTCAGA NGAAACGAAC ATTTGGGGA CAGGAAGCAA GCAGGCCCGG  
GGCTGCTTCC CTCCTGCCC ACCTCAGAGT CAGAGTTGGC ACATGACAAA TACCAAGCTC AGGGTGAAGA ACTGGGAGTT  
AACTGGGAAG TAGGGKGGC TCTATGCACA CGCAGGCTTC TAAGGGTGCA CGGTATGGGC AGKKGTTTG CACTGGGAGG  
CCCTATGTAC AGCTTGAAAG CTAGGGGTGA GATTAGCCCA GTGACTACAG GAACATACGT CAAAGTTGAG AGAAGA

SEQ ID NO:192: (Length of Sequence = 360 Nucleotides)

GTTGTTTTTG GTTATATGCA GCTTTTGAAT AGCATGTATT GTGCTTTTTT CTCTCTATG AATAATTTTA TATTTATGC  
TACTTCTTGA AAGTTTACTC TTGATGCTC TAAGAGAACA GCCAGATGGT TTATATGAAT AANCTTTATC TGCAGGATGG  
TGGATTGGTA AATNAGGAGA ATGTTGTTTG AGATATCAAG ATTTATGTCT GGGAACTAAA ATATATAATG CCAATGTGT  
TTTTGTCAAT TACTAGAGAA TTCTGTGCAA ACATATCATC TCTTCACATG CTGCACACTT TGCTTTTTGT TAAACAGCAG  
GTAGTAGACA GACCAATACC AGTTTCGGT TAAGG

SEQ ID NO:193: (Length of Sequence = 397 Nucleotides)

GAAAGACCA AGGAGATGGT GAAGACAGCA GAAGCCCAGA AGCAGCAACT GAAGGAGGAG CAGGGGAGGT CAGCAAGGAA  
CGGGAGAGTG GGGATGGAGA GGCTGAGGGA GACCAGAGNA CTGGAGGGTA CTATTTAGAA GAGGACACCC TCTCTGAAGG  
TTCAGGTGTA GCGTCCCTGG AGGTTGACTG TGCCAAAGAG GGCAATCCTC ACTCTTCTGA GATGGAAGAG GTAGCCCCAC  
AGCCACCTCA GCCAGAGGAG ATGGAGCCTG AGGGGCAGCC CAGTCCAGAC GGCTGTCTAT GCCCCTKTTC TCTTGGCCTG  
GGTTGGCGTG GGGCATGCGT CTAGCTTTCA CTCTGGTTCA GGTCCAACAG GGTCCGTTCT GTGCCTTTGG TGCCCCC

SEQ ID NO:194: (Length of Sequence = 225 Nucleotides)

GATTATTGGC TTTCCTTTCA TAACATGTAT TTTAAGTAT TTAATCTCTT AATGGCCCTC GTGTCTATTT TATACATCAT  
ATCTCTTAAT TCTCTAGATG GAACACTGAA GGACAGGAAT TAAGTAAAGT ACTGGCCATG CAAGGGTTGG AAATTTTACT  
GTATCCCTTC CTCRGTAGAA GTTATGTTAA ACATTCAAGC AACCACATAT CTAACAGAGG AGTTT

SEQ ID NO:195: (Length of Sequence = 294 Nucleotides)

ATTACTAGAT ATTTGTATGT TAAATTATGT GGGTTTTCAA ATTTGTGGAG AATAAGTAAT AGTGACATTA GTTTAAGGAC  
AGTGTTCAT CAGGGCATT ATTTTAATGAA TCCTATATTT AAATGTCGTG TTCAGGAATT CATGTGAATC TTTCTTTTAA  
TAGAGGACCC ACAGGCATGA NTTATTTACT CCTCCGGTGA TAGSTTCTCA CCTGTATGAA AGCGGAAGCA AATTCCAGGT  
TAGAACATTA TNCATGTTAT GTAGGGGGT ATAAAGTGTG TAAGTTTAAAT ATTT

SEQ ID NO:196: (Length of Sequence = 233 Nucleotides)

TTATTTTTCT CTAAATTTTA AAATAGAAGA CTTTAATGGA AAACATTTAG TACCATCATG TCAMCCTGAA TGCCAGCAAT  
ACCTCGACTT TTACACACGC AGGAAGCCTA GTAAAAGCCC CGTCAGTAGT ACACATTCTCT CTATGGTCCT TCAACAGTTT  
TTCATATACA AAATTTTCTG CTATTTTTGC TTTTGCAAC AGCAATAACT TTTGGGTTTC CCATATGACC ACC

SEQ ID NO:197: (Length of Sequence = 230 Nucleotides)

AAGATATCTA CTTGGAGTAG CTGTGCAGCC CCGCCCTCTG CTCCCCCAG CCTCAGGCC AGTGCCAGGA CAGCTGCTG  
CTGACAGGAT GTGGCACTGC TTGAGGAGGG GCACCTGCCA CGCCAGAGG ACAAGGAAGT GGGGGCCGCT GGCCAGGTA  
GGGAAGGKTG GGGCAATGGG GAGAGGCAAA TGCAATTTAT TGTAATATAT GGAATTAGAT TCATCTATGG

SEQ ID NO:198: (Length of Sequence = 118 Nucleotides)

TTCTCCTGGG GAAAGGGCTG TTGCTGAAGT GGCCGGTTT TTTAAGCATC GACATTGCA TCCAAAGTT CAAGCAGCCG  
CCTCAGGTT CARAGGCTTC CACCTGATGG CTGCATT

SEQ ID NO:199: (Length of Sequence = 268 Nucleotides)

TAAATGATGG AGTTAAATGA TGTGTCACT GCTATTTAA AAACTACTC TTCCCTTCT CTATGAGTTC TACTTTGGTA  
AATATTAATA TTTAACCAGT TAGTAAACT AACACCACTA TTTCAATTCT CTTTGTGCA TAGTAAGTAA ATTTGCTTT  
ACTTACTTTA TAAAAAATA CTTTACATT TATAAAGCAG GTTTAGAAA AACGGTTTAC AAGAAAGTTT GCTCCATTT  
CACTGCCAAT TTAAGCACAG GGGAAAT

SEQ ID NO:200: (Length of Sequence = 422 Nucleotides)

CCAGTGAGTT TGTGAAAAGC AACAGGGGTA NGACAGGTT AAGGAAGGAC ACAGACAGTG CCTGTTTTA GGTCCAAAT  
TTCTCTTTT TAATGGGTGG TGGGAGCTGA GCAATGATG CATTTGGAAG GGGCAATGAC TTGTCAATTA TGCAGAACAT  
GTAGGCATCA TGGAGAAGGA TGTGCATCGG TCTCTTGGGA TGAAAACCTGA TGTGTGTGAT AGGAGTATCC CTTTGGAGCC

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AAAGGTGGTG AAAGCCCTGC TTCTGGACAG TCCGGCTCCA ATCTGTATAC TGTTTGTCTG GGATGCTGTA CTCAAATACC  
 TGCTGGTCCG AATGAGCGAT GACAAGGTTG TTTGGTATTG GGGGCAATAG CCATAGCAGT CACTTGGGAA ATTGTAAGCA  
 GGCACCGTGC AGTGAAGTTT TA

SEQ ID NO:201: (Length of Sequence = 273 Nucleotides)

ACTCCACGCT GATGAACCCG ACGTCCATTT CTCCAAGAAA TTCTGAACG TCTTCATGAG TGGCCGCTCC CGCTCCTCCA  
 GTGCTGAGTC CTTGGGGCTG TTCTCCTGCA TCATCAACGG GGAGGAGCAG GAGCAGACCC ACCGGGCCAT ATTGAGTTT  
 GTGCCTCGAC ACGAAGACGA ACTTTGAGCT GGAAGTGGAT GACCTCTGTC TAGTGGAGTC CAGGCCCCCA GACTACTTGT  
 TACGAGGGCT ACAACATGTG CACTGGGTGC CCG

SEQ ID NO:202: (Length of Sequence = 436 Nucleotides)

GGACTCCAAC CCCCCAGGAG GCCGAATGCT GAGCTTGGCA ATGGTGGCCT GGATGGAGCT GATGGGCACA TCCCCACCGA  
 GGACCAGGTC CTGGGAGTCC TGAGGAAGGT GGTTCCTCTG GCTGATGCTT GCACTGGCCA AGGGTTTGCA TGGAGGAGGC  
 ACACCATGGC GCTGCAGGAC CTGCTCCACG TGTCTACCA CTGCCTCATA GCAGAACCTG AGGTGCAGCT TCTCCTGCAG  
 CATGTGCTTT CTCTGCTGCC GCATGCCCG CACCAGCTGA GGCAGCTCAG GGATTCCCTT CCCAGCCTCC ACCTCCTGCA  
 CAGCTGCATA GAGCAGTGCA AAGGCTCCCG TGCGGCCAC ACCAGAGCTG CAGTGCACAA TGATGGGCGT TTGCAGGGGC  
 CGTGATGCAA GGTAATTGTC GTGCACCTCC TGGGTT

SEQ ID NO:203: (Length of Sequence = 336 Nucleotides)

CTGCATGINT TGGGGACACT TACGCCAAGG CGCGCGTTC TCATTAGGAG CTGGGACCAG AAGTGAATAA GCCAGGTTCC  
 TGCTCAGGG AGCTCCATAG CAGGACTCAG AACCACACAC GGCCCTCTAG GCATTTKTGA AGCTCTGTGC TTCATTTTTT  
 TTGCTTTGCC TCTAGTTTTG CCTTTGCAGT ACCAATGCAG CCAGCCCATG TKTCCCTCT ATGTGGAATG TTAAGATAT  
 TCCACTGTT TCTGGTGTCC TTCTGTAAAT CAGAGCTGCC GTGACCATTC CAGTTCAGGC ATCCTGGTGG CCTGGCTTTC  
 TCTGGGCGAT AGAGCT

SEQ ID NO:204: (Length of Sequence = 393 Nucleotides)

GGATCAGAT GCTCAGGTGT CCAAGCAGGG ATAAGGACAG GCAAAATAAA TAACCCCCCA ACCCCCATCG TCACTCTGCT  
 GCAACACGAC ACAAAGGTTT AAAGATCTGG GCCCAAAGAC TCTGGGTCCC TTCAAGCAAG CTCAGGTGGA AGGAGGTTTC  
 CCCACCCCCC ACCAGGCCTG TTGCCCCAG GTTGCCCTAG GATGGAGGCA GTTCAGACCC TGGGTCACTG AAGCTGATAG  
 GAAGAACTNC GATATCAATG GCTTAAGCCT GCTGINTGCC CAAGGGAGCC AAGGGCAAGA GCCAAAGGCC CAATTTAAAG  
 GACGTGGACC TGGGGGGCCA GAGGAGGCAC CACAGCCGAG GGGAGCCACG CCCTGGGCCG GCAGGGCACA TGG

SEQ ID NO:205: (Length of Sequence = 390 Nucleotides)

GAGGAAGAGG ATGACCTGAG TGAGCTGCCA CCGCTGGAGG ACATGGGACA ACCCCCGGCG GAGGAGGCTG AGCAGCCTGG  
 GGCCCTGGCC CGAGAGTTCC TTGCTGCCAT GGAGCCCGAG CCGCCCCAG CCCCAGCCCC AGAAGAGTGG CTGGACATTC  
 TGGGGAACGG GCTGTTGAGG AAGAAGACGC TGGTCCCAAG GCCGCCAGGT TCGAGCCGCC CCGTCAAGGG CCAGGTGGTC  
 ACCGTACATC TNCAGACGTC GCTGGAGAAT GGCACACGGG TGCAGGAGGA GCCGGAGCTG GTGTTCACTC TGGGTGACTG  
 TNACGTCATC CAGGCCCTGG TTCTCAGTGT CCCACTCATG GACGTNGGGG AGACGGCCAT GGTCACTTCT

SEQ ID NO:206: (Length of Sequence = 172 Nucleotides)

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CTTTACTGTG GGTGTGGTG TCACTGTCAC TGCCACAGCC ACTNGGAGGG ACACACAGCT TTAACCCCTR TTTGCTTAGG  
 NGAAGGGTGG GGGCATTTCAG GGTATATAAA CTAATATAT ACACAGAAGG TCCTAGGKAG AAAGCCACCC TGAGCACACA  
 TGTCTAGGCA CA

SEQ ID NO:207: (Length of Sequence = 215 Nucleotides)

AAGGCAATTA GAAGATTAT TGAATATTGG TTAAAGTAG ATTGACAATG ACATTAAAGA ATAAAGTGTA ATTTATTTGG  
 TGCTACTTTG TGAATGCTTC CAAGTACAAA TCATCTCACA ATACCATATA CAACATACTT TCAATCACAA CTCAAATATA  
 AAATAACCTA CAAAATCACA TTGCTATAAT CAATATACAA TAATGTATT TTTAA

SEQ ID NO:208: (Length of Sequence = 444 Nucleotides)

GGAGTTCTCT TGTCCACGGA GAGCAGTGTT GCAGTGTATG GAATGCTAAA TCTTACCCCA AAGGGCAAGC AGGCTCCAGG  
 TGGCCATGAG CTGAGTGTG ACTTCTGGGA ACTAATTGGG TTGGCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG  
 AGTCTGACGT TGATGTCCAG CTCAACAACA GACACATGAT GATCCGAGGA GAAAACATGT CCAAATCCT AAAAGCACGA  
 TCCATGGTCA CCAGGTGCTT TAGAGATCAC TTCTTTGATA GGGGGTACTA TGAAGTTACT CCTCCAACAT TAGTGCAAC  
 ACAAGTAGA. GGTGGGTGCC ACACCTTCA AGCTTTGACT ATTTTGGGGG AAGAGGCATT TTGACTCAAT CCTCTCAGTT  
 GTACTTGAGA CCTTCTCCC AGCCTGGGAG ATGTTTTTGG TATT

SEQ ID NO:209: (Length of Sequence = 338 Nucleotides)

GCAGATCACT TGAGGTCAGG AGTTCGAGAT CAGCCTATAT ATGCAAGTAC ACACACAGGC ACTCGCACGC ATGCATGCTC  
 ATGCAACACA CATGTACACT CTACATGTAC AGCTCACATA TGCAATCCATA CACATGTGCA TGCTCACCCA TACACCAGCC  
 ACACACAAGT ACTCATACGC ATACATGGCC ACACACAAG TACACACAGC TACACCATAT GCATATGTAT GCACTCATAC  
 ACTCATACAT ATGTGCCCCC TCAGAGAAGT ACACAAGTGC ATGCGCATCA CACATGCATA CGTGCTCATG CATACACAGC  
 GGACATTTCA TACACAGC

SEQ ID NO:210: (Length of Sequence = 371 Nucleotides)

GAGGAAGTAG AGCCTNAGGA GGCTGAAGAA GGCATCTCTG AGCAACCTG CCCAGCTTGA CACAGAGGTG GTGGAAGACT  
 CCTTGAGGCA AGCGTAAAG TCAGCATGCT GCAAGGGGAC TGTAGATTTA ATGATGCGTT TTCAAGGGTA CACACCAAAA  
 CAATATGTCA ACTTCCTTTT GGCTGCACT TTGTACCAA TCCTTAATTT TTCTGAATG AGCAAGCTTC TCTAAAAGA  
 TGCTCTCTAG TCATTTTGGG TCTCATGGCA GTAAAGCTCA TGTATACTA AGGGGGAGTC TTCCAGGTGT GACATCAGG  
 TTATTGGAAA AACAAAACGT GGTTTTGGGA TCTGTTTGGG AGACTGGGGA T

SEQ ID NO:211: (Length of Sequence = 295 Nucleotides)

CCTCCCAACG TGTTGACATT ACAGGCGTGA GCACACGCAC CCAGCCCATC TAGCATAATG TTTTGCATAG TTGTCAGCAG  
 ATAAATATTG AATGACAAAA CTCAGATGGA GGAAGAAAGAA CAAAATAACC TAGTTCTCAG AAAGATTAA TGAGCAAATG  
 GGAAATGTC AAAAAGATTT ACAGACAGGG GCATCTTAGA GTCAGTGGAA TCACACAGGC CTTCCCTCAG CTGAGGGGGC  
 TGCCCTGGAGG TGGGGGTGGG GGTACACCTC CTCAGTGGGG AGAGACTTGC CAAAT

SEQ ID NO:212: (Length of Sequence = 370 Nucleotides)

TGGCCGATAT GAGGGGGTG GACTGGGCC CCGCGCTGCC CCGCGCCT CCCTATGTCA TTCTCGAGGA GGGGGGATC  
 CGCGCACT TCACGCTCGG TGCTGAGTGT CCGGCTGGG ATTCTACCAT CGAGTCGGGG TATGGGGAGG CGCCCCGCC  
 ACGGAGAGCC TGAAGCACT CCCACTCCT GAGGCTCGG GGGGGAGCCT GGAAATCGAT TTTCAGGTTG TACAGTCAG

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CAGTTTGGT GGAAGAGGGG GGCCCTAGAA ACCCTGTAGC GCAATGGGGT TGGGCGCCCC AAAGGTTAAG TTTGAACCCG  
AAGAGCAAAG GAAGAGGCGA TCATCATAAG TGGAGGATTA GGATTAGGAT

SEQ ID NO:213: (Length of Sequence = 302 Nucleotides)

ATCTGTGGAA TAATCTGOGG GCTAACACGG ATAACTCAGT ATAAGAACCA CCCAGTTGAT GTCTATTGTG GCTTTTTAAT  
AGGAGGAGGA ATTGCACTGT ACTTGGGCTT GTATGCTGTG GGAATTTCC TGCCCATGA TGAGAGTATG TTTCAGCACA  
GAGACGCCCT CAGGTCTCTT GACAGACCTC AATCAAGATC CCAACCGACT TTTTATCTGC TAAAAATGGG TAGCAGCAGT  
GTATGGGAAT TTTCTCATA AGAAGGGCAT CCTCAAACC GGAAACCACA GAGATGCTAG GT

SEQ ID NO:214: (Length of Sequence = 354 Nucleotides)

ATGGATGAGT GGGCACCCCG CACAGGGCTG CAGGGTGGAA AACGCTCGAC GGCCAGGTGG TGA CTGTGGG GCAGAGAGCG  
CAGTGTNGTA GGGGAGGAGA GGTGGTGTCC CTGCTGCTG GGAGCCAGCC TGCCGTGCTG GTGGGCAGAG CAAGGCACCT  
TCTGCTGCCG GTGCTTCCAG GGCCTAAGCA GCGCTGCAC ACTCACCAGC GCAAGGCTCC TCTGCAGGGA ACCAGGGCTG  
CTACCCATTT CACAGATGAG GGCAAGCAAG GACTTGCCCA GGGTGTCCCA NAGCAAGTGC GTAACAGGCC CTGAGAAGAG  
NGCCAGTGAG CTCATCTCTGA GTTAATTATG GGCT

SEQ ID NO:215: (Length of Sequence = 260 Nucleotides)

TGGTTCAAAG TCTAGGCCCT CTINAGAGCT GGCTGATTCA GCTTGCCAAC AGTGACATCA GGGTGAGGCT TCCTCTGTCC  
ACAGCATTAG CTGCGAATAT CCTCATGGTC ACAAGATGGC TGCCAGTGGC CGTCAGGGTG TGTGCTTCT TGTTCACATC  
CAGTGGAGA GTGACAGCCT GCTCCCTTA GCTCTCTGAC ACCANTGTGA AGGTGCCANG AACTTACTAG CAGGCTTTTC  
CTCATGACCC ATTCAACAGG

SEQ ID NO:216: (Length of Sequence = 232 Nucleotides)

CTGGACAAG ATCTGGGATA ATTCTCTGGA TTACCTGGCA GAGACTTTTK TTCTCTTCCC TTACTGTCTC CCAAATAAAC  
AGTCTCTCAC TCTGTGTGTA GCCACCTGAA GCTGTGATAT TTCCAACGAC TGTAGGAGGA AAAAAATTAG GGGAGAGAGG  
AAAACAAAC CAACCAACCC CTANATCAT TTTTATTATG TACATAACGA CCTCATTCTC CTGTATATGC GG

SEQ ID NO:218: (Length of Sequence = 219 Nucleotides)

CTGCAACCAT CCATACCTTT TNCCTGGG TGCTATGGAG TCCCCAAAC TCCCAGTGG GGCTTATGAG GGTGGGCGAC  
TTATTANGIN GTCTGGGAAG CTCATGCTGC TCCAGAAGAT GCTGCGAAGC TGAAAGGAGC AAGGACACCG AGTGCTCAAT  
NTTCTGCGAG ATGACCAANA TGTTAGCCTT GCTTGAGGGC TTTCTTAGNC TATGAGGCT

SEQ ID NO:219: (Length of Sequence = 390 Nucleotides)

GATAGGTAGC AGAGACCAAG GCGCAGGGTG CTTCAGATGA GCAAGAGAAC CCAGTGAAC CAGATACCCC AGGTGGGCGG  
GAGGGACCCC AGACCTTCAG AGGGCTGCCC TGGTGTCTC CACAGTGCAG TCCCTCTGTA TTCCAGAGT GGGATCGGGG  
CTTTCAGCCC ACCCTGATGC CTGCCCCCA GGATGGCTGG TTAGTCTGG GTCCATGTCC CAGACCCCTC TATTCTGCTC  
CAGGACAGCA GGACTTCAGG TCTTCTCTGG GGGTGGATAT AGGAGAAAAT TTCTGCCTGG CACACACCTG GGCTCCAACC  
ACTTGCCAAG TGATTCACTC TTAGGCCAG GGGGAACACA ATGACTATCA TTAGTGATGC AGACCTGGCT

SEQ ID NO:220: (Length of Sequence = 382 Nucleotides)

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TTTTGTTTT GTTTAATAT TTTTGATATT CTCTTGCAT TGAAATGGTA TAAATGAATC CATTTA AAAA GTGGTTAAGG  
 ATTGTTTAG CTGGTGTGAT AATAATTTTT AAAGTTGCAC ATTGCCCAAG GCTTTTTTTG TGTGTTTTTA TTGTTGTTG  
 TACATTGGA AAATATTCTT TGAATAACCT TGCAGTACTA TATTTCATTT TCITTATAAA TTTAAGTGCA TTTTAAGTCA  
 TAATTGTACA CTATAATATA AGCCTAAGTT TTTATTGATA AGTTTATTG ANGTTCTGAT CGGTCCCTT CAGAAATCTT  
 TTTATATTAT CCTTCAAGTT ACTTTCTTAT TTATATTGTA TGTGCATTTT ATCCATTAAAT GT

SEQ ID NO:221: (Length of Sequence = 314 Nucleotides)

GACTTTGGTT TATTTA AAAA ACAAGCCAAA AAAAAA AAAA ACCCA ACTTTATATA CAAAGTCAAA CTGAAACCAC  
 GGWTTATGGA AAGAGGCAAG AWTTATGGGT AACAGGGGAG AAGGCTGGGC CAGAGCCAAT ACCACATTCT GAACACAGGA  
 GCCACGGGAA AGAGGTGCTG GTTCTTCTG GCAAGACCGG GGTGACTGGA ACGCAGTGGT CCTACTGGCA AACCAGCCCC  
 AACACTGAGC TCCTTCTAGC ATGGACTCCA TTCCCGTGAT TGGCCAAGGG AGACCCTTCC CCCAGGAGGC CTGT

SEQ ID NO:222: (Length of Sequence = 342 Nucleotides)

TTCTTCTCT GGGCGGCAC GTGCNAGCA GCGTCTTCG CCCCGTCGTC AACTTTGAGC TGGAGGAGAA GCAACTTTGG  
 CAGTGGCCGC GGGGTGGGAA TCCCGCTTCT CCGGCGAGC AGTAGGCTCG CAAGTCGCTG GGGTTAGGTG GGGCAAGAGT  
 TTGCGCGGCG CATCAGCGCT TGCTTCGAC TGTTCGCAAC GTGTTCCAG CGAGCTGGGA GCGGGGGTTG TGAAGTGGAG  
 TCGTCTGGGG GAGGGGGACT TGTTCCTTCT TTCTCTAGA GACCTCGGCT TTCAACTGGA TCAAACGTTG TCGAAAGGAT  
 GTAAATAGGC AAGAGCAAAC TG

SEQ ID NO:223: (Length of Sequence = 376 Nucleotides)

GIGATGGCTG CCTTGAGGGG GACCATCATG TGGAGAGCG ATTGGTGAG GTCTCAGCCC ACAGCCCATG CCCAGCCTCC  
 TGCAGACTCA GGTATCCAG CTGGTCGATG GCTCTTTCGA TACCTGGTGC CTCTCTCTCT CCGGCTTGGC AGGCTTCTCT  
 GGGGCTTCT CAGATGACTC TTTTGCTTC TTCTCTGCTT TGGCTAACTC CTGCGCCAGC TCTGAACGTG CCTCTTGGC  
 TCCCTCTTCT ACCACCTCT CCCGTTGGC CAACCTGCTC ACGGCGTCT TGGTAGTGGC TTTGAGGCTC TCCTTGCTAT  
 CAGCCGCTG TTTGATTTTG CTGGGCTTGA GGTGGTAAG GCACAGCCCC AAGAAG

SEQ ID NO:224: (Length of Sequence = 445 Nucleotides)

GTGATAGAC ATTGGCATG GGGTTGCTC CACCTTTGG CTGTCATGAA TAATATTGCT ATGAACACTA ATGTACAATT  
 CTTGCTTGA ACGTAAATGT TTTCAATTCT CTGGGTATT TATCTAGAAA TGAAATTGCT GTATGTTAAC CTTTGTGTTA  
 ACCCTTGAG GAACTGGCAG ACTTTTCCAA AGCAGCTGCA CCATTTTAAA TTCTAACCAG CAGTGTGTTGA GGGTTCCAAT  
 TTCTCTATAT CCTTGGTAAC ACTTGTATC TGCCCTTTTG GTTAGAGACA TCCTAGTGAG TGTGAAGTGG CATCTCACTG  
 TGGTTTGAT GTGCATTTCC CTGATAGCTA ATTGTGTGGA TCCCTTTTGC TTTTAGTGGA ATGAAATATC TGGTAGTCTC  
 GTATGCCAAA CTAAAGCTAA AATTAAAATG ACTCTGCATG ATGGA

SEQ ID NO:225: (Length of Sequence = 403 Nucleotides)

TGCTCTGGG ACAGTTTCCC GGGCAGCTCC TGGCCAGCTT CCAGCCGAGA GTCTCAAGT CCAGGGCACC TTGGGCCCAG  
 CGCAGGCAGA ATCCGAGGTG GTCCGTGGTC TACCTGGGC CTCTACTCC CCAGCAGCCC TGGAGGAGGC AGGGGCTCCC  
 CGCCGCGAG GCTGCCTGCC CTAGGCCAC CTCTGCATGC TGCTCATGGG GCCACCTGC CTCTGGGCC CTCACTCTGC  
 CTAGGGGAGC TGGGCCAGGC ACTAGCCTTT GCCAGGGAG GTGGCCCTCA GGTGCCCAG GTGCTGCAC CCCAGCCGGG  
 CTTCTCTGGG GCCTCCCGT CGTCAAGCCT ATATCTCTCT TGTCCCAACC CCAGCTGTCC CTTGCCAGGG GACTGGCATA  
 AAA



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SEQ ID NO:226: (Length of Sequence = 440 Nucleotides)

GTGCCTTAAG GAGAGAGATT GTGTTCTTCC TCTCTCAGGG GTGATAACTC AGGAAGCCTC TGGGTTGGGA AGACCATCAG  
 TCTTTTGTG TTAGGTTTCT TTTCTGTCC CTCTTCCATC CCCAAGATGT GACCCATAA AAATTTTTC TGAGTTGGCC  
 AGGCATGGTG GCTCAGCCT GTAATCCCA CACTTTGGGA GGCTGAGGCG GGCGGATCAC GAGGTCAGGA GTTCGAGACC  
 AGCCTGACCA ACATGGTGAA AACCCCATCT CTAATAAGGA TACAAAAATT AGCCGGGTGT GTTGGCACAC ACCAGTAAGT  
 CCCAGCTGCT CAGGAGGCTG AGGCAGGAGA TTTGCTTGAA CCTGGGAGGC AGAGGTTGCA AGTTAGGCCG GGATTGCGCC  
 GTTTGTAICTC CAGCCTGGGC AAGCAGAGCA AGACCATCTA

SEQ ID NO:227: (Length of Sequence = 426 Nucleotides)

GACCAAGAAG TTCCGGTTCG AGGAGCCCGT GGTTCGCTT GACCTGGACG ACCAGACAGN CCACCGGCAG TGGACTCAGC  
 AGCACCTGGA TGCCGCTGAC CTGCGCATGT YTGCCATGGC CCCACACCG CCCAGGGTG AGGTTGACGC CGACTGCATG  
 GACGTCAATG TCCGCGGGCC TGATGGCTTC ACCCGCTCA TGATCGCCTC CTGCAGGGG GGCGGCTGG AGACGGGCAA  
 CAGCGAGGAA GAGGAGGACG CGCCGGCGT CATCTCCGAC TTCATCTACC AGGGCGCCAC TTGCCACAAC CAGACAGACC  
 GCACGGGCGA GACCGCTTTG CACCTGGCCG CCGTTACTTA CGCTCTGATG CCGCAAGGC TCTTGAGGCC AGCGAAGATG  
 CCAACATCAG GCAACATGGG CCGAAC

SEQ ID NO:228: (Length of Sequence = 278 Nucleotides)

CAGGACCAGG AGAAGATCCT GGAAGATGCA GTGGATGAGT GGACGGGCTT TAACAACAAG GTTAAAAAGG CCACTGAGAT  
 TGTTTTAGAA AACCAACAGC AAAACACTGA CAAGGTACAT AAATACAGAT TGGACATTTT AGGGTAAATT CACTGTATTT  
 CCTACTTGCT TGTAGGAAAC CGAGTAAAGT GGAAAGCTG TCCTGATCAT ATGGCATGCA CACCAGACTG CAAAGGNCG  
 TCCACACTAT TTAACAGGAC TGTGGCAAAA TAGCTTTA

SEQ ID NO:229: (Length of Sequence = 425 Nucleotides)

TTTTTGTTCC CAAGCCTTTG TGA CTGACTT TAAATCCTCT CACCTGCAGA ACAGAGATGG CTTCAAAGTG GGGAGTGAGG  
 GAGTGAGCGA GGACCTTGG CTGAGACCTG TTTTCTTCC ATTTCTGCTG TGGCTTCCCA CAGCTCCCTG GTTCCACACC  
 AGGCCCTGCT CTGCCGAGA AAATGGATTC CCAGGCCACA GAGCTGTGAG GCCTTTGACT TTGCAGAGAC CAAGCACCCC  
 AGAGGCTGTG CGACASGGCT AGTCCTGGT GGGCGGTCT GGGGCATGGG GGGCAGGGAG ACTKGGAGAT GGGGAGGGCG  
 TTGAGAATCC GGGGGTCTT GGATACTTGA CAAATGGCT CAGGTCTTAG CTYTGCTG CCACTGATT GTGTGCTTG  
 GCAAGGTGCA AGTYTTCGGC TGTC

SEQ ID NO:230: (Length of Sequence = 382 Nucleotides)

TTGGAGGATG TGCTGCCCTT CCTGCAGCAG GCGACGAGC TGCACAGGGG TGATGAGCAA GGCAAGCGGG AGGGCTTCCA  
 GCTGCTGCTC AACAAACAAGC TGGTGTATGG AAGCGGCAG GACTTTCTCT GGCGCTTGGC CCGAGCTTAC AGTGACATGT  
 GTGAGCTCAC TGAGGAGGTG AGCCAGAAGA AGTCATATGC CCTAGATGGA AAAGAAGAAG CAGAGGCTGC TCTGGAGAAG  
 GGGGATGAGA GTTCTGACTG TCACCTGTGG TATCGGTGC TTTGTGGTCA GCTGGCTGAG CATGAGAGCA TCCAGAGGCG  
 CATCCAGAGT KGCTTTAGCT TCAAAGGAGC ATKTTGACAA AGCCATTCTT CTTAGCCAG GA

SEQ ID NO:231: (Length of Sequence = 398 Nucleotides)

GAGGCTGGAG AATCGYTTGA ACCAGGAGG CGGAGGTTC AGTGAGCCGA GATGGCGCCA TTGACTCCA GCCTGGGCCA  
 GAGCAAGGTT CCTTCTCAA AAACCTGGAA ATCTGTTGGG AAGTAGGGG AGGGCAAGGT TAAACCTAT GCAGGTGTGT  
 CAATTAGACT TGTTCCAACT TGAGAACCTG AATTTTGCAT GTAATTGAAA TGTTCCAGAA CAAGTCTGGC AGTTTCATAA

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GGGAGTTTTT AGATGCCAAT ACATTGCAGA TAACCATATT GGTACATTA GGGGAATGAG CATGGGATAG GTGCTCCCA  
 GTTGGTAGGA TAGCATGAGG AGGTTTCAA AGTAACCSCT TTAAGGGTTA TGTCCAGTAT TTGCTAAGTA ACCAAGGT

SEQ ID NO:232: (Length of Sequence = 272 Nucleotides)

GGGGCTGCAG ACTGAGTTAT TTTATTTCGC TATTTCAGT TTGAAGCTAC TATCATGGGC GTTTAGAGTT ATACAAATGA  
 CACTTACAAA AAATAAAGA CCAAGACACC CAGAGTGAGA TGCAATGTTGG GGACGGGGGA GGCTGGCAGC AGGGGGGCCC  
 CGGCGGYTCA CCCCAGGGCT CCGGAGGGG CGACGCTGG CTTCATCCAC CCGGAGGSC CAGGAGCAC CAATCACAGC  
 AGGGGCTCTG GCCCAGGTGT CGGCAGCCCA GG

SEQ ID NO:233: (Length of Sequence = 364 Nucleotides)

ATTTTACAGT TTTATTTTTA AATCATTTAC ACATATTCAT ACAAAGAAAA ATAAATTTCA GGATGGAATC CTGGGGACCA  
 TGGTAGTTTA AAAAAAAAAA TCTCTCTGAT CATTAGCTAC TAAAGACANG GCAAGAGGCT TAGCAGTCAT TTCTGGGGT  
 TAGTGTATCT CCCCATGCAG GGGACAACTG NGAAGAATCC AAGCTGCTCC CTCATCTTCC TTGATCTAG ATGGGGGAG  
 GGGATTTTCC AATGCTCTCC CCTAGAAACA TTCAAGAAG TACAGCAAAG GCTTATGGTA ACACTGGAAC CTATTTGCTA  
 GAAATCTGGC AAGATTGCAC TTTCTGAACC CAATTTTCCT ATAA

SEQ ID NO:234: (Length of Sequence = 217 Nucleotides)

GGCCAGGAGC CAGAGGGCCC CGGGGCCACC CTTGCCGGGG AACGTGATGA CCAGAGTCCA GACAGTGTC CAGAGAGGCC  
 GCGGCCCCGA GACCGGAGGC TCTGTCTGCC CTNGTGGAC GCTCGCCAC TCCCAGGGAG GACGGCCTGC CCGTCGCTGC  
 AGGAGGCCAC GCGGCTCATC CAGGAGGAAT TTGCCTTCCA TGCTACCTG GACAATG

SEQ ID NO:235: (Length of Sequence = 221 Nucleotides)

AACITTAAG TTAGGATTTT AAAATATTTG TAACTGGCTA AATTTTAAAG TCGTGACAAA TAATTACTTA GTTCAGAAA  
 TATACACACA CTACTCTTT AGCCAGTTTC TTCAAGGTN TTACTGTCCC ATCAGATATC TAGCCATTTK CCTTTGCAA  
 TTACATACCT TCTTAAGAGT GTATTTTTAA GATTATTACT TATGCTTTAT GATGATATAG T

SEQ ID NO:236: (Length of Sequence = 221 Nucleotides)

ATAAATGGGT TTCTCACTCC TTAGGGACAC GATTGGAAC AATACATCCC ATGAACACAG GTGAATGTCC CTGTTATCC  
 CTGAGCTGGG CAGTTTCACA CAATCANTTT TNCCTGAGG CCAAGTCTG TGSTTTGATC ATCTTAGCAG CTTCAGAAC  
 AGAAAGTAGG TTTACTTTGT CTCCAAANTC TNATTCTCGG TGCTCAAAGA AGAATGACCT G

SEQ ID NO:237: (Length of Sequence = 251 Nucleotides)

GACATCTTTC TAAGATTCTC TGTGGGAAAA TGACTGTCAA TANAATGCGG GTTCTGGGC CATTGCTCTT ACTTTCATTT  
 TTGATTACA AATTTCTCTT GACGCACACA ATTATGCTG CTAATCTCTT TCTTCTAGA GAGAGAACT GTGCTCCTTC  
 AGTGTGCTG CCATAAAGGG GTTTTGGGAA TCGATTGTAA AAGTCCCAGG TTCTAAATTA ACTAAATGTG TACAGAAATG  
 AACGTGTAAG T

SEQ ID NO:238: (Length of Sequence = 327 Nucleotides)

GTTCGTGGCT GTCACAATAA TGCTGTGATA ATGCTGTGGT TTCCAGCAG GGAGGTGGGA GCGGGGAGGG GGCTGCAGCC  
 TGATGAGAGC CAGCTGAAGG AAGAGCTGCC TCTCCCTTCC TAAGCCCTT CCCAAGGTCT GCCCCACGC CCAACCAAA  
 GACCACTCG AACAAAGTGA GGATGTGGAT GCTCTGCTG GTTCCGCTGT TCCGAGAGG GAAAGAAAGG GTAGCTGCAC

TGACCCCACT GTCCCATAT ACAAGGGTTK GGGGCAAGA GCATGTGGCT ACTCCAGCA AGGGRAAAAT GGGAGGAGCA GTAGAAA

SEQ ID NO:239: (Length of Sequence = 285 Nucleotides)

ATTATTAGTT TATGGTGCTT TAAACCTATC AAAATAGTTG TAAGTAAATG GATTTCTTGT NCTCCCAATA ACAATTCTCT  
GAGCTAGGAT AGATGTCTTT CTGGCCATTT TACAGGTGAT GACACTGACA TAGGGACTGA GTGGGTAGCT TAAGTNCAT  
GGTTACCAGG AGCAGGACCN ACGTTTCCTG NCTCCAGTC TCATCCGTGT TTCCACTGAC CAGGTGGTGT GCTCCCTTGG  
AAAGCAGTCC CTGAGAGTTG ACTTAGAAGT TCAGGGNGAA GAGGT

SEQ ID NO:240: (Length of Sequence = 349 Nucleotides)

TTTTGCCATG TTGGACAGGC TGATCTCAAA CTCCTGGCCT CAAATRATCT GCCCAGCTTG GCTCCCAAA GYCTGGGAT  
TACAGATRTG AGCCACTGCA CCCAGCCTGA CATGCCATAG TTTCAGCAIT TTCITGGGCA ATGATCCAAG CTGAAGGCTG  
GTCTGAGGGA TCTSAAGAAG CGTATGAGTT GGAAGAGAGG GACAGAAAGG AAGAAGACAT GTGAAGAGAG AAAAGGAAGG  
AAGCTAGCAG AGGAATGCCC TCCAATAGAG ACTGCTGCCT GAAGCTCAGC CCCTCTGAAG ATAGGTAGGC CAGGCTGGCT  
TAGCTGAGGC AGTGGGTTAG ACCAGCCT

SEQ ID NO:241: (Length of Sequence = 233 Nucleotides)

GTGCAGCGGT CTGCCTTCAT CTTTTAATGG CCGGTGGGT ACAGTATAGT GACAGACGGG GGATGGGACA CAGCAGGGGT  
GAAACAGGGC AGTCACAGCC GGGGCCGGG ATCTGGAAGC GGGGGGGTC CTCCTCTGG AAACACCGTN TCTGGAAGGA  
CACCTTAGG ATCCCTGAC CTCARGGTGC CACCCACAG GGCCTGGTGT TCTGGGAGGC CCGGCTKGAG TGA

SEQ ID NO:242: (Length of Sequence = 372 Nucleotides)

ATATGIACIA CATTITGGTGG AATACGCATG TACAATCTT CAAAATAGT AAAGAGCAA ACAACAAAA AATAGTAGAA  
GCACTGGAGA AATACACTAT GGCATAAACT AGTTACGGGT GGGATGTCAC ATGGACCATA TCTACACTCT GTGGCAACCT  
TCTTACCTGA CTCCAAAGGA TCAGATAATC AAACAGGAAA TTATGGTAGG AAATCAGAAA ATTGAAGTAT GCATTCAATAT  
CCTAAGCAIT TTATTTTAGC TCAAAATATA AAAATATTCA TCAGTTAGCC AAGCTTTTGN GATGAGAGAT CATAGCCTCC  
TCTTTGATAG GGGGTTTCTT GGGTTTCCTT GATTTTATGT TTCAGAGTTT TT

SEQ ID NO:243: (Length of Sequence = 256 Nucleotides)

CTCACACATT CATACCCAAG GAAGAGGCAA ACACACTCAA GTCCAGAGTT CCCAGTGGTG CCGCCAGAC CTACTGTCCC  
GGGGGTGTA TGGCTGTCCC TGGCTTCCC CAGAGCAGCC AGGACAGCCT GCACCGNCTN CCAGACTCTC GCAGGAAGGG  
GAGCTCTGCC CTGGGGAGGA AACTNACAGG CTGGGAGACA AGACTCCCAT CCGAGGGACA TGCACAGCAG CAGCCACAGC  
CCCGGGAGC GGGCAT

SEQ ID NO:244: (Length of Sequence = 220 Nucleotides)

CAAATGGCAG TTCTCGAGAA TCGACGAGGA ACTTAAATCT GGACTCAGG TTTCAGTGG GTCTCOGACT CCCACCACCC  
CGCCCTCCG NCTGTCTCGC CGCCAGNGT GACCTCCAG CGAAGGAATC TTCTTCGGAT GGGTGACCT TGCCANAGG  
TGTGGCACCT GGNGGACTAG GAGGCGCTC CANACTAAGG GCGCTCANTG CGGCGTTCTT

:-

SEQ ID NO:245: (Length of Sequence = 239 Nucleotides)

150

TTCAATGCTCA TGTAACCTTC TTAATAGTGC CTGTCTGCT GGGTTTGTAG CTGTAAGAGT TCTGCAAACT GGCCCTATAA  
 AAATATTGAT GCTGTCCATT AAAATGAATC TCTCTCTCTC ACTCAGTCTC TCTCTCTGTC TGCTCTCTTT TCTTCTCTCT  
 CCTGCCATGT GTGTGTCTCT CTCTACTCCT CTGATTTTGN CCTCTCTCTC TATTCTGCTA CTCTCTCTCC TCTCTCCG

SEQ ID NO:246: (Length of Sequence = 269 Nucleotides)

GGTTTCACCA GCGTTTAAIG TGCTCTGATG TTGACCGTCC CTCTNAGTNT TCTGGGGAGG AGGGGGTGGG GCGGAGGGTC  
 AGGAAAGCAG GCTCAGCTTC CAGGGTCAGG GAGTTGTGGG CCCAGAGGGG CTGTACAGT GGATGCACCC TGCCCCCTCC  
 CTGCCAGAC CCGAGGGTAG GGCAGAGGCA CCTCCTCGNC AGCCTNITGGG CTGCACCCAC AGGGAATNGA GGGGAGGGGC  
 ACCATTACCA CTGGACCCAC CAAAGACCC

SEQ ID NO:247: (Length of Sequence = 297 Nucleotides)

CTATTCAAAG TTTACTGACC TCCCCAGCCA GGCAGGCCAA CCCCTCCGAG CAGGGGAAAT GTCCATCTAG CTGCCCTCTG  
 CTGGGTGCA GCCTATGCCA TGAGAGGGTA CTGGAAGCAG GAGGGAGCCC TGGCTAGGGC AGGCCTTAA CCGAAGGGAA  
 GCTGAGCAGA GATCTGCACA CTCAACCCCA TTTGATATTC TTCTCCTCCT CAGTCATGGC CAGCGTGTG GTGACTAGAC  
 CGGTGCCAAT AGTCCGGTTG CCATCTCGCA GGGTGAAAAG ATGGCCTTTC TCTTAAG

SEQ ID NO:248: (Length of Sequence = 281 Nucleotides)

ACAACAAGCA CACCAACTAT ACCATGGAGC ACATCCGCGT GGGCTGGGAG CAGCTGCTCA CCACCATTGC CCGCACCATC  
 AACGAGGTGG AGAACCAGAT CCTCACCCGC GAGGCCAAGG GCATCAGCCA GAGCAGATG CAGGAGTTCC GGGCGTCCCT  
 CAACCACTTC GACAAGGATC ATGGCGGGG GCTGGGGCCC GAGGAGTTCA AGGCCTGCCT CATCAGCCTG GGCTACGAGC  
 TGGAGANCGA CCGGCAGGGT GAGGNGAAG TTCAACCGCA T

SEQ ID NO:249: (Length of Sequence = 383 Nucleotides)

AGCGCATCCA CACCGGGGAG CGGCCCTACC CTTGCTCCTA CTGTGGCAGG AGCTTCCGCT ACAACAGAC ACTCAAGNC  
 CACCTCCGTT CAGGCCACAA TGGAGGCTGT GGGGTGATA GTGACCCATC AGGTACGCA CCCAACCCAC CAGGTCCCT  
 CATAACTGGG CTTGAACTT CTGGCCTGGG TGTCAACTCT GAAGGTCTAG AGACCAACCA GTGGTATTGG GGAAGGGAGT  
 CGAGGGGGAG TTTTGTAAAT CCAAACTCTT GTGGTTTCAT GCTTTGTATA TGCTACAGC AGGCACAAAT AATCCAAGAG  
 AAGGTCTGTG AGCCCNATC CAACACCCAC AGTAATTATA ATCTTGGCAC ATCAATGGAA TTT

SEQ ID NO:250: (Length of Sequence = 397 Nucleotides)

GTATCCTACG TTACAACAAT AATATCATGG GAGAAATAGA AATAGCCTAG TTTGCTTCCA ATAGAAACTG CTTTTRACAT  
 GGGCTGTATA TAAAAATATT AAAGAGAAAC AAACTGTAC ATTCTCTCAT TGCTCCGCTA CAGACAACCC ATGTCATAAC  
 CTTGTTGCAA ATATTTTTCT CCTATAGCAG TAAGTACAGC ATTAGAAGGT GATTAGAGAG TCTGTTGATG AAACACAAAT  
 GTATGTTTTT ATTGATTTTT ACTTTAGAAC ACTACAGAGT TCCTGGGACC GGGGTGAANG GCATTTAGCT GGGGTGGTTT  
 GTGTGGGGT TAAATACCTT CCCACTTGCA AGTGAATTGC CTGTNCCCGC TGCGGGAATC CTGTINCTTG GGTGGGA

SEQ ID NO:251: (Length of Sequence = 276 Nucleotides)

GGCCATAAAA GAAAGAGCCT GTTACCTATC CATAAACCCC CAAAGGATG AGACGCTAGA GACAGAGAAA GCTCAGTACT  
 ACCTGCCTGA TGGCAGCACC ATTGAGATTG GTCTNCCCG ATTCCGGGNC CCTGAGTTGC TCTTCAGGNC NGATTTGATT  
 GGAGAGNGA GTNAAGGCAT CCACGAGGTC CTGGTGTGCG CCATTAGAA GTCANGACAT GGACCTGCGG CGCAGCTTT  
 TCTCTAACAT TGCTCTCTCA GGGAGGGTTC TACCTT

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SEQ ID NO:252: (Length of Sequence = 314 Nucleotides)

CCTGAACAGT CTGTTTCATT TGACTGTTTG GGGGTCTCCC AGTTTAAGCA AGATATTTAA GCCTTATTTT TCTTGGCATG  
 CTTGGATTCC CCAGTAAAAA AAACCTCTGC CCTGGGCTGA CAATCAAAGT TCTGGGAAGT AATATGGATA AGCAAGCTGG  
 AAATGGAGAA GGCTATTCAC TGTGCTGGG TCCTACTGTT TTCTGGNTGG GAACTGCTTT TCCATTAGGC CTGGTGTGCC  
 CTGGAAGGGA NGAGCCTCTT GCAGAGACTA CAATCTTGA TGGGTCTTT GCCAAGTTT AAGGTAGSAA CCCA

SEQ ID NO:253: (Length of Sequence = 293 Nucleotides)

GAACACTCTG CTCCAGCCAA GGTGGTGAGG GCAGCTGTTT CTAAACAGCG CAAAGGCAGC AAGCCACAGT CCCACAAGCC  
 TCAGCCTACC CGTAAACTGC CACCCAAGAA GGACATGAAG GAACAGGAGA AAGGAGAAGG GAGTGATAGT AAGGAGAGTC  
 CAAAAACCAA ATCAGATGAA TCAGGGGAGG AAAAGAATGG AGATGAGGAT TGCCAGCGAG GCGGCGAGTA GAAGAAAGGA  
 AACAAACACA AGTGGGTTC ATTACAAATA GACATGAAGC CTGAAGTGCC CAG

SEQ ID NO:254: (Length of Sequence = 413 Nucleotides)

CTTTTCTTA ATATATTAA ATTTACCAAG GCAAGACAGT GATTTATGGA CATTTAAATT AGTTAGCTT TGTCTGCTG  
 TTCTAAAACA TTGTGTACTG TCTGATAGAC TTTTAAAAA CAGTGCCTTT CCAGGATGAT TTATGATATG CAGTATTGTT  
 TATAGATGCC CATGGCTTAA CCTTGAAAAG TCAATTAAGT GACACAATTA AGAGAGATAT GAATAGTGGT AGAAAAAGCA  
 TGTACTCTGG ATAAGTGGGG GTAAATCTAG TATTTGTAT TCCTGTCAGT AATATTGTCA NTAGTATTTT TTAGAAGGTT  
 TAATTTTTTT ATGGGTTATA AATTCATGTC ACTCTCTGTC AATGGGTACC ATCAGTGGGA ATGCGGAAT TATCCATGCT  
 TTGGGGGTTA AAA

SEQ ID NO:255: (Length of Sequence = 376 Nucleotides)

GGGTCCAGGG GAGAATCAAT ATATCTAGTA TAGTTTATAT TTGTACCTTC TCTCCTTAAG AGTTACAGTG AGTGAAGCTA  
 CTCCTCAAAT GGAGCACCTC TCTCCAGGAG AGTAAGAAGA TCACATAAAT AGAAAGTGAG CTTTGGACTC TAACAGACAT  
 AGGTTTATAT TCAACTCTGC TACTTAATAT CCATATTGGT TTGAGTTATT TAACCTTGAC AATCCACACT GTAAATGGG  
 TAAATAATAA ATACCTCTCT CTCAGAAGTG TTACAAAGTT TATATGAAAT AATGTGCTTA AAAAGCTGGG TACATAGTAG  
 GAGCTTAGTC ATTGTTTATT TTCTCCCTCA TACCATACA TGNITCATT CTAAGT

SEQ ID NO:256: (Length of Sequence = 241 Nucleotides)

GTAGAGATGG GCTCACTATK TTGCCAGGC TGGTCTGAA CTCTGAGGT AGGAGGATCG CTTGAGCCTG GGAGACAGAG  
 GTTGCACTGA GCGAGATCA CGCCACTGCA CTCCTGCCTG GGTGACACAG TGAGACTCTG TCTTAAACAA AACAAACAA  
 AAAAAGGCCA GCGCAGGGG CTCACACCTG GTAATCCAG CACTTTGGGA GGCCAAGGTG GGTGGATCAC CTGAGGTCAG  
 G

SEQ ID NO:257: (Length of Sequence = 406 Nucleotides)

CAAGGGTGTG CTTGCCAGTA TCACTGTAA TGATTGCTT GTGGGACGCT CCGTGGATGA GGCTCTGCGG CTGGTCCGAT  
 TAAGAAAACC AAGAGAGGCC GGGCACGGTG ACTCAGCCT GTAATCCAG CACTTTGGGA GCGGAGGTG GCGGATCATG  
 AGGTCAGGAG ATTGAGACCA TCCTGGCTAA CACAGTGAAA CCGGTCTCT ACTAAAAATA CAAAAAATT AGCTGGGCAT  
 GGTGGCAGCG GATTGTAGTC CCAGCTACTA GAGAGGCTAA GGCAGGTGAA TCGCTTGAAT CCAGGAGGTG GGGGTTTCAA  
 TGAGNCCGAG ATCGTACCAC TGCACTCCAG CCTGGGGCAA CAGAGTANGA CTTGCTAACC CCCAACCAAC CCNCCAACCC  
 CCGGCC

SEQ ID NO:258: (Length of Sequence = 157 Nucleotides)

GAAAAGAAGG AAGGAAAGAG GGGAGGGAGG GAGGAAAGGA GAGAGGGAGG GAAAGAAGGA GAAAATGCTG GAGCAAAGGA  
GGTGGTTAC ATGATTTCTC TAATGGCAAT GAGCTGCTTT CTGGATGAAA TACAGAATCA GAGCGAGACT CCGTCTC

SEQ ID NO:259: (Length of Sequence = 361 Nucleotides)

AAGCAGATAT AAATGGGACC ACTGTGAATC AAAGGGGAAA AATTCCAGGA AAAAAAATT CCAATAGCTT CACAGTTTAA  
CTGAGGTTTT GGAAAACTT AAGTGAATTC AGCTGATGTT TGAAATATCT GTCTACATTT AATTAGATGT GTTGTATTTA  
CCAAGGAGGC ACAAATATGT AGTTCTGTAG ATTTTAATAC TAACTTTTC AGTAAGAAAA ATAATACCAG GTGATTTCAA  
AAAGGSCAGT GATCTATAAA CACTCAAAT GCATCTTTGA ACAGGGGAGC AGAAATAGCT AATTTAATGA AAACAAACCT  
TAAGCACTTT ACTTGGCTTC TAATAAGGCA TCCCAAGAAA A

SEQ ID NO:260: (Length of Sequence = 349 Nucleotides)

CAATACATGT ATACAGTGA CACTGATCAA ATAAGAGTAA TTAGCATATT TATCACCTCA TTTCTTTTGT GGTGAGAACA  
TTTAAATCC TTTCTTTTGT CTATTTTGAA ATATACAGTA CATTGCTATT AAGTATAGTC ATCTGGCTGT GCAATAAAAC  
ACCAAGACTT ACCCTCCTG TCTGTGACTT TGTACCTGT TCACCACTCC TCCATCCTC TAGTAAGTAC CATCTACTC  
TCTACTTCTA TGAGCCTGAC TTTTAAAT TCCACATGTA AGTGAGATTA CATGGTATTA TTCTCTCTGT GGCTGGCTTA  
TTTCACTTTA ACATAATGTC CTCTAAATT

SEQ ID NO:261: (Length of Sequence = 415 Nucleotides)

GGAAGATGAG GATCTAGGTG TGAGCGTGCA GAGCCCTGAG GCTGGGCAGG CAGGGAGCTC TGCTGCACA ATGATGTAGC  
CATGTGTGGC CACACCAGCA CTGGGCAGCA CCTCTGGGA GGGGGCAGG GCAAGGACAA CTGGAGAGAC AAAGCCAGAT  
GGGSCACGT CCTTACAGT GTGTGTGCAC GCACATGTGT GTGTGTGTGT GTGTAATAGC CAGGGCAGAA ACACACCATG  
TAGGTCAGG AGGACAGAAA CACATCATGT AGGCCAGGCG TGGTGGCTCA GGCTGTAAAT GCCAGCACTT AGGAGGCCA  
AAGTGGGCGG ATCACCTGAG GTCAGGAGTT CGAGACCAGC CTGGCCAACA TTGCAAAACC TCATCTCTAC TAAATTTCTA  
AAATTAGCCA GGCGT

SEQ ID NO:262: (Length of Sequence = 382 Nucleotides)

GGCATGGGGT CTGGCTTTAA TGTTAACTG ACGTGGGTCA CTGAACTGT TCAGGCTGAT CTGAACTCC TAGGCTCAAG  
TGATCCTGCT GCCTTGGCT CCCAAAGTGC TGAATTACA GGAATGAGTC ACAGCACCA GCCGGCTGTG TTTTGTMTT  
TGTTTTTAC CCCGACAGG NCTCAGTCAG TCGTTAGCTG GAGTGAAGTG GGTAAACACA GCTCACTGCA GCCTTGATCT  
CCTGGGCTCA AGTGATCCTT CCATTTCTTC CTTCAGAGT AACTGGTACT GCAGGCCAC GGCACCACAC ATGGCTAATT  
TTTAAATTTT GTAGAGACGA GTCTTGCCA TGTTTGCTCA GGCTCCAGCT GTTGTATTCT TT

SEQ ID NO:263: (Length of Sequence = 447 Nucleotides)

TGTATCAACT CAGAAATTC AGAGAGCTCT TCCTGGCTGA AAAGATGTCC AAGGATCATC TCCGGAATGG AAGAGGTGAG  
GCCTGTAGC TTGTGGGCTG CCCAATCCAT CCAACCTTG GCATTGGGAT CAATGTGAT GAGGACAAGA CCTTCAACAG  
TGTCGGGTG GTTAAGAGCA TATCTCGCCA GGATGTAGG TCCAGCTCCA ACACCACTC CAATTATTGT AGAGAAATTT  
AGGTACTGCA GGACGCAAGG GATCATGCT GCAAGCTGGT CCAGAGATGG GTACTGATAT CCCAAAGGGA ACACAGGGGC  
TCCCTCTTC ATTCCAGGG CATCCCATG GACCCGACA AAGTTCTGAA TGATTTCTG CATGTCTCG AACTKGAACA  
GTGGCTGGAG GAAAGATTTA TAGTTGAGTC CACATCGGT AGGTAAG

SEQ ID NO:264: (Length of Sequence = 317 Nucleotides)

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TTTTCGCTGT CAACAGACAG TTTATTCTAT ATACAAACAC AATTTTGTAC ACTGCAATTA AATAGAATGG AATGAGCGCT  
 CCTCCGCATT CCTCCCGAG TGA CTGGTTT GGCCGCGGC CACTCCATCC CCGAGTGGGA CTGGACCACG GCCCTGENTG  
 CTGCCACTGA TGTGTGNGCC TGCACCCAC GTCCCTATGC CCGAGGCGCA ANTCTGCTCT CCCGGGGACC CCAAGNCTGG  
 NGCACACGCG GGGAGGGCGG GGCCATGGAG AAGGCACTGC AGGGAGCACC AGGCAGAGCC GTGTTGAGGC CGGCGG

SEQ ID NO:265: (Length of Sequence = 270 Nucleotides)

GCAGAGCAGG TGAAGTGAT CAGGAACCAT AGTGTACAGT TCCAATCAGT AGCTTAAGAA AAAACCGTGT TTGTCTCTTC  
 TGAATGGTT AGAAGTGAGG GAGTTTGCCC CGTCTGTTT GTAGAGTCTC ATAGTTGGAC TTTCTAGCAT ATATGTGTCC  
 ATTTCTTAT GCTGTAAAAG CAAGTCTGC AACCAAATC CCATCAGCCC AATCCCTGAT CCCTGATCCC TTCCACCTGC  
 TCTGCTGATG ACCCCCCCAG CTTCACITCT

SEQ ID NO:266: (Length of Sequence = 297 Nucleotides)

ATGAGGCGAG GCCTGCGAAG TGGCTGGCAT GCAGCAGGTG CTAATGAGTG TTGCAAAGGT GATGTACGC AGGCAGCTTC  
 CCGTGGCCAG AGAAACATTG CAGAGAAGGG ATAAGTAGGG CTTAGTGACT TTGACGGTC AATGGAAGAA TGACCCAAAG  
 AAGGCTTCAA GGCCAGGCCT GCACTTCTCC ACCACAAAG CCCTCACTGA TAGCACCAC TCCCCACAC TCAGCTTTNG  
 GGCTAGGTG TGGGTACCC AGCTAGAAGC CACAGGACCC TGAGGCGTCC GAGGGT

SEQ ID NO:267: (Length of Sequence = 387 Nucleotides)

CTTGTTTTCA TCATGAGCTC GATCAGATGT CTCTGATCT TCAGACTGGT GGTGTCTAT AATGTCTGT GCACGCATTC  
 TTGAGCTTTC CAGGATTTCT GTCTGTTCTC TCTGTTTATC TACAGAAGAA ACTTCTCTCT TGAGTTCCTG TTCTTGTAG  
 CGCTTGAAC TCTCTTCTCT TTCTGGTTTA CGATCTCTCT CTTTCCATCT ACCCTGTCTG TCTTCTGTGA GGTGCGAGGG  
 ACTAAGAGAA CGAGATTCTT GAGGTCTGAC AACTTGGCTC AAGAGTCTGT GTTTTTCAT TTTTATCAT CTCACCTGTT  
 GTAGGCATCA CTGTCCGGAG AATGTTCAAG CCGGCGCTTT CGGGGGACTG TCTAGGGCTG GGACTCC

SEQ ID NO:268: (Length of Sequence = 318 Nucleotides)

CCTGAAGGTT ACCTCTTTGG AGAGAACATG GATCTGAACT TCCTGGGCAG CGCCCGGTC CAGTTTCCCT ACGTCACTCC  
 TGCCCCCAC GAGCCCGTGA AGACGCTGCG GAGCTGGTGA ACATCCGCA AGACTCCCTG CGGCTGGTGA GGTACAAAGA  
 CGATGCCGAC AGCCCCACCG AGGACGGCGA CAAGCCCGG GTGCTCTACA GCTTGAGTT CACCTTCGAC GCGATGCCC  
 GCGTGGCCAT CACCATCTAC TTCCAGGCAT CGGAGGAGTT CCTGAACGGC AGGGCAGTAT ACAGCCCCAA GAGCCCT

SEQ ID NO:269: (Length of Sequence = 422 Nucleotides)

ACATGTCTAT TCAGGTCTTT TGCCCATTTT GAAATAGCAT TGCTTGTTCT TTTGCTGGAT ATTAACCCCT TGTGAGGTGC  
 ACAGTTTGCA AGTTACCTTT TCTCATCCIA TAGGTTATCT CCTCACTCTT GATGTCTTCT GTTGTGTGC AGTAGCTTTT  
 AAGTTGGTG TAATACCAIT GTGTTTCTC TGCTGCCCTT TTAAGTTTCA CTGGGTCAA AGTTTAAAT TTGTGAATTC  
 CTATATTTT AGGGCAATTC TCCTGCCACT GTTGGAAITA TGCTCAATC TATGCAGTAG AATATTAGTG TGAAATGCTT  
 CTGTACCAAT GGAGATGATG CTGGATGGTC TCTATCATAA ACCCATACCT CATCAACACA AACTGCAATT ACACAAGGGC  
 TCTATATCAT GGATCTCCAT TT

SEQ ID NO:270: (Length of Sequence = 376 Nucleotides)

GAAGAAGAGC CCAGACCTAG GGGAGTATGA TCCACTTACC CAGGCTGACA GTGATGAGAG CGAAGACGAT CTGGTGCTTA  
 AACTGCAGAA GAATGGAGGG GTCAAAAATG GGAAGAGTCC TTTGGGAGAA GCGCCAGAAC CCGACTCAGA TGCTGAGGTT  
 GCAGAGGCTG CAAAGCACAT CTTTCAGAAG TCACCACGGA GGGCTACCC TCAGAACCC TTTGGGGCCT GGAACAGAAG

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GCGGCTCTCT CCTTGGTGTG ATATGTGCGC ACGTCTGTCT TCCTGCTTGA CTTTGGGGAT CTCGATGATC CTGGTGCTCC  
TGTTGTCTTT CCTGATCCCC TGCTCTCCA GAGATCTTGA CAGAACTGGA GCGCA

SEQ ID NO:271: (Length of Sequence = 346 Nucleotides)

TGTTACAGTT CCCTTTCTTT GTCTTTCTTT TTCTATCTT TATCTATACT TCGACTCTC TCCTTTTCC TCCTTGTTC  
TTTAGCCTCA CCTTTATGCT TATGACTGTT CCCACTAAGA TTCCACGTT GATCATCAAT TTTACGNTA TCTCGACTCC  
TACTGCGACT GGCACGATTG GTCTGTCTAT CCCTTGAGCG ACTTCTACGA ATGCTTATGA AAAAGAATCA AGTTGGNCAC  
CAAATGTTTC ATAGCAGTAG GAAATTTCTT TTAGAGACTT CTGATGGGAA ATTTGAAGTG TATGTTGCTA TCAGATCAAG  
TGCAGGAGAG GTATAAGGCT ACTGGA

SEQ ID NO:272: (Length of Sequence = 394 Nucleotides)

GTGTGTGTG TTGAGTCGGA GTCTCGCACT GTTGCTGGG CTGGAGTGCA ATGGTGCAAT CTCGGCTCAC TGTAACCTCC  
GCCTCCCAGG TTCAAGCCAT TCTCTGTCTT CAGCTCTCTA GTAGCTGGGA TTACAGGCAC CTGCCAGCAC ACCTGGCTAA  
TTTTTTATAT TTINAGTACA GACAGGGTTT CACTATGTTG GCCAGGCTGG NCTTGAATC CTGACCTTGT GATCTGCCCC  
CCTCAGCCTN CCAAAGTTTT TCAGAAATTT TTAAGGAAAC ACTTTTAACC CTTAAGGCTT TCTTTCAAC TCAGATCCCC  
TTACACAATT GATCAGACGT GGCAAAGTTT TGCTCAAAG TTTTGGACT GGGTTCCAC TTTAGGCTTA CTGA

SEQ ID NO:273: (Length of Sequence = 259 Nucleotides)

CAACCTGTAC CCAGSCTGCG AGAACGIRAG TTIRAGGAGC CGCAGCATGA TGTTCGAGCC GGGTCTTACC AAAGGRATGC  
TGGAGGTGTT TKTGCCCCG ACCCACCACC CGCACTGCTC GCGGATGAC CAGTCCACCA AGGSCATCGA CATCCAGAAC  
GCTTATTTRA ATGGAGTTGG CGATTTGAGC GTGTGGAGT TCTCTGGAAA TCTGTGTAT TCTGCTGTW ATRACTATTT  
TGCTGCAAT AATCCACG

SEQ ID NO:274: (Length of Sequence = 348 Nucleotides)

TCCCAGTTGT CCGATTGTA ACTCAAAGG TGGAATATCA AGGTGTTTTT TTTCATTCCA TGTGCCAGT TAATCTGTCT  
TTCTTGTITT GGCTGGGATA GAGGGGTCAA GTTATTAAIT TCTTCACACC TACCTCTCTT TTTTCCCTA TCACTGAAGC  
TTTTTAGTGC ATTAGTGGG AGGAGGGTGG GGAGACATAA CCACTGCTTC CATTTAATGG GGTGCACCTG TCCAATAGGC  
GTAGTATCCG GACAGAGCAC GTTTCAGAA GGGGACTCT TCTCCAGGT AGCTGAAAGG GGAAGACCT GACGTACTCT  
GGGTAGGTT AGGACTTGCC CTGTGGT

SEQ ID NO:275: (Length of Sequence = 396 Nucleotides)

GTTTGGTGAA TTTGGTCTGT GATAAAATTG GAGTTCAAGA AACAAACAGG AAATACAAG TGCCCCCTCG CCCCCAGGTC  
ACCCGAGTGG CAGGSCAGTG ACCGCTGCTC TCAGGCTGCC CAGTGTGGAC CTGCTGTGCG GAATGCTCCT CTTCCAGSTC  
CCCTGCTCC TGTGTCCAG CCACATGCAC CTTCCTCTA CTTCTGGGAT CCCTGCACCA GGTCTGCCCC TGTCTTCTCA  
GGGCTGCTCC TTTTGGNCCA CAGGACCTCA GCTGGAATGT TGCTCTCTCC AAGAGGCTT CTTGACTATT CAGCTCAGAG  
TGGCCACCCA GCCACAATCT GCCATGTGCT TTGGGGGATT GTCTGTTAAC TGCAACATA CTGGCAGCCC ATAAT

SEQ ID NO:276: (Length of Sequence = 381 Nucleotides)

GGTGTGGGG AGGTGCGCA AGGGGCGAG CCGGGCAGC CGGCGCAACC CCGNCCCAG CCGCACCAC CGCCGCCCA  
GCAGCAGCAC AAGGAAGAGA TGGCGCCGA GGCTGGGGA GCCGTGGCGT CCCCATGSA CGACGGGTT NTGAGCTGG  
ACTCGCCCTC CTATGTCTG TACAGGGACA GAGCAGAATG GGCTGATATA GATCCGGTGC CGCAGAATGA TGGCCCAAT



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CCCGTGGTCC AGATCATTTA TAGTGACAAA TTTTAGAGAT GTTTATGATT ACTTCCGAGC TGGTCTTGCA GCGTTGATGA  
AAGAAGTGAA CGAGCTTTTA AGTTAACCCG GGATTGCTAT TNAGTTAAAT GCAAGCCAAT T

SEQ ID NO:277: (Length of Sequence = 206 Nucleotides)

TTAATACGAC AGGGCTGGCG CCGAGTAAT TCAAGCCCTT CGGAAGTGTG ACCGGCTGCC AGGCCTCGGA TGCAATCCTG  
GAGGCGGGAG ATTGCGCCIN AAGACTGGCT CGAGCCGCCC AGGGGCTCCA TGGGAGACTA ACGCGGAAGT YCCAGCCGTC  
CCAGTGCCGT GACGTCCCCC CTGGTGGGG CCTGCACCCG ACTACT

SEQ ID NO:278: (Length of Sequence = 260 Nucleotides)

ACCTGTAATC CCGCACTTT GGGAGGCTGA GGTGGGCAGA TCACGAGGTC AGGAGATAGA GACCATCCTG GCTAACACGG  
TGAAACCCCA TCTCTACTAG AAAAATACAA AAAATTAGCC GGGCATGGTG GCGGGCGCCT GTAGTCCAG CTACTCGGGA  
GGCTGAGGCA GGAGAATGGC GGAACCCG GAGGCGGANT TGCACTGAGC TGAGATGCGC CCGTCTCTCC AGCCTGGGCA  
ATAGAGTGGG ACTCCATCTC

SEQ ID NO:279: (Length of Sequence = 308 Nucleotides)

GTGCTGGGC TCAGGGTGG CAGCTTGCA GAGGAGCAAG CTAGTAGAAA TATTGCAGGG TTCCAAAAC CAGGTCAAGC  
AAGATGCCAT GTCACCCCTG AGCATGCCCTG TCTTCCAGG GGTGTACCTC TTGGCTGGCA AAGCCAAGGC CAGTGGGNAC  
TTGTATAAAT CACATGGGTA TGTCTTGGT TCAGTGATCT TGGAGTGATG ATGGTAACTN ATGAACAGAG AACTTTYAG  
AACTTKGGTC CTGTCTTCT CCTGAACCT AGACAAGTTT CACCCCTCT CCTGTACCCA ACCCAAT

SEQ ID NO:280: (Length of Sequence = 402 Nucleotides)

ATTTTAGCAG CTTCTTGAA ATTTAAATA TATGTGAAG TATCTCATTT ATATGCATTT CTAGTTTCTT TATACAACAG  
AATAACTTCT TTTACATCAA ATTTCTGAAT TTGACTAAAT TTAGAAATAA TGGAATCTCA TCCATTAAAT ATAGTCATAG  
AAGGAAGGAA ATATGAAAAT TAGGATTICA GATGTTTGAA CATAAAGAT AATTTTAAAC ATTGTCTAGTA ATCTATTTCT  
TTTTTTTTTC GAGACGGAGT TTTGCTCTGT CACCCAGGCT GGAGTGCACT GCGCGGTCT TGGCTTACTG CACCTCTGC  
CTCCAGTTC AAGTGGATT TCCTGCCTCG NCTCTCTGAG TAGCTGGGGT TACAGGGGCA TGCCAACATG CCGGGGCTAA  
TT

SEQ ID NO:281: (Length of Sequence = 313 Nucleotides)

GAGAATCCGT CTTAAAAGA AAAAAAGAA ATTATAGAGG GAGATGAGGT GGGACAGAGT CTGGCAGTTC ATCAGGGGGA  
CTGAGAAGGT GGCATTGGGA GGAGAGGAGG CAGTGAGCTG TGCAGTGTCC AGGCAGCCAC CCTTCCCAGC GGCCACCATG  
ACGGTGTCTT CATTTCTTA ACCATTAGTA ATCATTCATT CATTCAITCA TTTATCCGAC GTCAGCTGGA GGNCCTGCCC  
GNGGGGCATG CGCTTAGATT TNGGAGGCCT TCCGGGATGC TTGCGCTCCA ACGGGGGAAG GCCGACTTGG GCT

SEQ ID NO:282: (Length of Sequence = 217 Nucleotides)

TGACCTCAGT TGATCCACCC ACCTTGGCCT CCCAAGTGC TAGTATTATG GGCGTGAACC ACCATGNCCA GCCGAAAAGC  
TTTTGAGGGG CTGACTTCAA ATCCATGTAG GGAAGTAAAA TGGANGGAAA TTGGGGTGCA TTTTCTAAGG ACCTTCTTAA  
CANATGGCTA TAAINTAAGG GGTTAGGGT CTTTTTTTTT TTTTCAGGGA TACATT

SEQ ID NO:283: (Length of Sequence = 327 Nucleotides)

TAGAGAGCGC TTTACTCCTG GTCCCATGGC GTAAAGATGT GGCTGGGCCT GACAAGGCTC AGCCTCCAGT CTTAAGATGG  
GCACAGAAGG GCAAGAAGTA AGATGACGAG TCCAGAAAT AGGACAAGCC ATGAGCCAAG GCCTGGTCTG AGCAAGGGCA

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GGCCCCCTGTC CCAGACACAG GCACCCCCAA TCTCACTTTG GACAGAGCCA ACGTGGGGGG ATCTTCCCGG GCCTGGGCCT  
GTCAAGTCTG CCTGCAGGAC CCTGCCATTG TGCTCAAATC ACAACCAITTT TTTGCTTCCA ACATTTTAGG GTGCTTGTGC  
AGTGAGT

SEQ ID NO:284: (Length of Sequence = 340 Nucleotides)

CTTTGGAAAT GTAAATTGTT ACAAACTTAC TTTAGAGCAA ATTTAGTCAT CCTTCAAAAA TTAAATGTA TACTTATTTC  
CTAAGAATTC GTTTGGCTCA CACAATTGTG AAAAGATAGA TGTACACCAG TGTTCATTAC AACATTATG CAACAAATCT  
ATTATGTGCC AGACATTATT CGGAAGTCTG GGAATACATA AGTGAACAAA GCAGATTCTT GATCTCAGGA CCTGGGGTCA  
GGGTCAGGA GAAGCCAAAA AACACGCTNG AGAAATACIT TATGCAGTGT GGGGGGAGTG CTACCAGCAG AGCAGGGGAT  
GGGATGTGA AATCTTGTGT

SEQ ID NO:285: (Length of Sequence = 335 Nucleotides)

GACATTCACG GAGGTGGGTT CGACCTCCGG TTCCCCCACC ATGACAATGA GCTGGCACAG TCGGAGGCCT ACTTTGAAAA  
CGACTGCTGG GTCAGGTACT TCCTGCACAC AGGCCACCTG ACCATTGCAG GCTGCAAAAT GTCAAAGTCA CTAAAAAACT  
TCATCACCAT TAAAGATGCC TTGAAAAAGC ACTCAGCAGC GCAGTTGCGG CTGGCCTTCC TCATGCACCT GTGGAAGGAC  
ACCTTGACT ACTCCAGCAA CACCATGGAG TCAGCGCTTC AATATGAGAA GTTCTTGAAT GAGTTTTTCT TTAAATGTGA  
AAGATATCCT TCGCG

SEQ ID NO:286: (Length of Sequence = 399 Nucleotides)

GCACAATTAT TAAAAAGAGG CCACTTAAAT TCAACTCTCC ATGGATACAG TGTCTGTGGC AATGTTAAT TAGAGATTAA  
AATTGAGGAA TTGAATAATT GAGGTGCTA ATGAATTTGA AACTCAGCA AAGCAAGGAG AGCTGAGCGT TTTTCCGACT  
TAGCTTTTCT TTCTCTAACC CTTTCTCAT TTCTACTAT TATCACAINT CTGGCCTTGA CTGCTGAGTT TATTACTACC  
CATAACCTG GCCTAAGTGG AAACAAAAA GCTGTAGCCT CTTTGTGAG CTCTGGAGA CATTGGTCT ATTGGATTAA  
TGACATGTT AGAAGCTTGC AGTTGCAGGA GGCTGACAAT GATGAAAATG AGATATGNTG GGCCACCACG CTTTCTGT

SEQ ID NO:287: (Length of Sequence = 294 Nucleotides)

TTCCAGTTGA ATTCACCACT GGACAAAATG AGGAAAACAG GTGAACAAGC TTTTCTGTA TTTACATACA AAGTCAGATC  
AGTTATGGGA CAATAGTATT GAATAGATT CAGCTTTATG CTGGAGTAAC TGGCATGTGA GCAAACTGTG TTGGGTGGG  
GGTGGAGGGG TGAGGTGGGC GCTAAGCTTT TTTTAAGATT TTNCAGGTAC CCTCACTAA AGGCACOGAA GCTTAAAGTA  
GGACAACCAT GGAGCCTTCC TGTGGCAGGA GAGACAACAA AGCGCTATTA TCCT

SEQ ID NO:288: (Length of Sequence = 391 Nucleotides)

TCTACAGATG AGGAAAGCAA GCCTCAAGCA AGGGGGGCCT GATCCTTTCC CTGTTCCCTG TGTATTCCCT GTCTGTGGCA  
AAGCCCATG CCTTGATTCT CTCTCTTTA CTTTCATGTT GAGAAGTAGT TTCTTCTGCG AGTTTATTTA ATTTACTGGC  
AAAATGAGCT ATTTTTTTTT CAGCAATGTT TCAGCTAGAT ATTTGCTTTA TGCATGTAAT GTCAATGAAG TACTCATAAG  
TTTTCAAGAA ATGACTGATA TAAATCATGT GTTCCACTAC ATAGTCTAAA TATTTAGTAT TTGGTCATCT ATTTTAATAT  
GTTCAAATTC TGTAAACAA GNCATAGTCA CTATGTGAAG ATAAAAATAG NCAAGTGC ATTATGACTT T

SEQ ID NO:289: (Length of Sequence = 198 Nucleotides)

CTTATATTCT ACTTTATTG GTAAACTCA GAAACTAACA ATTCACATCC TCCCACCTTC TTCTTTCCGA AGAAGGCAGT  
TTGCAGAGAC AAAAGGGCTG TGGCGTGGG ATCATCCACC ATCTCCAGT TTTACACCCA GGCTACCCAT GGCTTGGCAG  
TCAGGCCTCT AGGCTGATTG CTCTCAGAG CAATAGAA

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SEQ ID NO:290: (Length of Sequence = 353 Nucleotides)

GGTTTTCATC TTCGGTTTAC AAAAGTCCTA CTATTTATTT ATTTTAACTT TAATTTAAAT ATCACCCTACC TTAGGTAGAA  
 GTTTTCCTTT GTGTAATATA ATATAAAACC GACATTTCTT GGGGGCATAA TAGTAAAGAT GTTAACATTT TTTGGTTCTT  
 TTTGGATGCT GTATTTGTCG TCTTTCTGAA AGTGATGTTG GCCAAGATGG CTCATGTAAC CCAGTTTTGA CTAGGCTATT  
 GATATTCTGT CTGGTTAATT TATTGAACTG GCTTAAAGCT ATACATATTT CCTTTTAGNIGTAA GATATTCTAG  
 ATATATTGGT CTACTGATTC ATAATATCAC TGG

SEQ ID NO:291: (Length of Sequence = 163 Nucleotides)

CCTGGTAGGC CTGCTACACA GTCTTGCAAC GNCCTCGTG CTGCGGCTTC TGCGGTGAGG CAGGGGAGTC TGCTTGCTTT  
 AGATGTTGGT GGTGCAGTCC CAGGACCAAG CTTAAGGAGA GGAGAGCATC TGCTCTGAGA CGGATGGAAG GAGAGAGGTT  
 GAG

SEQ ID NO:292: (Length of Sequence = 397 Nucleotides)

ACGGGAAGGT GAGTATGTNA GTATGINTGC CAGACAATGG TGTTCOCATG TCAATGGAGG TTTCTCAGAG AGAGGTGATC  
 TGCTGGAGA AAGCTTAATC TGGTGGCAAT GGACAGGTGA CTTTAAGAAG TGGGAACGA GGAAGGAGG CCAGTTTGAA  
 AATNATAACA AGGGTCCAGA CTCAGTGATG CAGCAGTGAC CATGAGAACA GAGCAGCTGC AGGTAGAAGA TGGAGACAGA  
 ACTNGGGAGA TCTGGTGGAG GTAAGCCGCG TGGAAAGATG ATGTCAGGTT TATACCTAGA GGACACATGA TCCATTACAC  
 AAGCCAGGGG NAACCTAAG AGAAAACACT TAGAATTTN GGAGAANAGG CTAGGGCTGG GCCTTAGACA TGGGCTG

SEQ ID NO:293: (Length of Sequence = 360 Nucleotides)

GAGGTAAAAT TTACATACAG TGAAATCCAA ATCTTAAGTG TACCACTAGA TAAATTTTGA TAAATGCATT ATGCCTGGTC  
 TTCACACACC CTTTTCAATA TATAGAAAAT NTCCAGATAA TTTATTTTGT TGTMTTTTTC ACACACTAAG TTCTAGACTT  
 TTCCAGGTCC GAGGGAACATA TTAGGGGGGA AAGTACTTGT NATAGTAAAA AAGATTTTAG GTGTGTTTGT TTTTAAGGTG  
 CAGAAACACA TCGCAGATTT AAGGTCTGCA ATCTCTGCTT TTTGTTATTG TTCCAGTTTT GATCTCAGTG ACATTACAAG  
 CAAGCAGAAA CACTCAGACA TGAAATGGCC CAG

SEQ ID NO:294: (Length of Sequence = 321 Nucleotides)

TTTTTTTCAG GNTTCAACCG TTTTATGCGG AGGTTTGTGT TCTGTGAAA TACACTAGAG GGTGGGGAAG GGGACACATT  
 CACTTTGCAA GATAAGGGTT TCCCACCACT AAAGGAAAGG CATGGGGCAG GGCACACTGG GGTTTGGGTC CGTTTTCCCA  
 CCTCCTTCG CTGCGCTCAC TTTTCTTTTC TCTCAGCAAG TACCACAGAA CACAAAGACA AGAAACAAAA CAGCAATCA  
 ACCTCCAACG GGGCCATGCC AAGCCTTCCC CACTCCCCCA GGCTGGGCAA GGGCTGGGAG GGGGCTGGGG CAGCTCACTC  
 G

SEQ ID NO:295: (Length of Sequence = 165 Nucleotides)

GACACACAGC GCCTCGGCC COGCACAGGG GGCATGTCCA GAGGTGCTGT GTGTACCAA CTGGTCTTCT AATTGGAAG  
 GAGTTGAAA GGCCTTTTGT TTGATGAAAA GTTGGAACA GTGGCACATA TCTNAGAGGG AGGAACGAGG CAGCGTGGTG  
 AAGCG

SEQ ID NO:296: (Length of Sequence = 315 Nucleotides)

CGAATACAGG TAGTGCCAG CTGGTTGGGC TGGCCAGGA AATNCTGCT GTGTCAAATA CTGCTGGCCA GGATGAAGCC  
 ACAGCTAAGG CTGTGTTGGA GCCCAITCAG AGCACCAGTC TAATTGGGAC TTTAACCAGG ACATCTGACA GTGAGGTTCC

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AGATGTGGAA TCTCGTGAAG ACTTAATTAA AAATCACTAC ATGGCAAGNA TAGTGGAACT TACGTCTCAG TTGCAGCTGG  
CTGACAGTAA CTCAGTGCCAT TTTTATGCCG AGTGCCGAGC ACTGTCTAAA AGACTNGCCT TGGCTGNAAA GTCTA

SEQ ID NO:297: (Length of Sequence = 244 Nucleotides)

AGTACGGTIN NCGCTNAAGC TTGAINATCG RATTGCCAAT CINCATATTT GTGTAGAAT CATTTGTTTT TGTCCTTCA  
TGTTTCTATA AGATAGGACC AATATTCTTT ATTGGGCTTT GATTTTATTT TGTAACTTAA ATGTATTAAG GCAATAAATG  
TAATTTTCCA CTNAAAATA TCATTATAGA TTTGGTACT ACCTACTGCT CAGCAATTTT TTTTCTTATC AAAATTCTTC  
CTGG

SEQ ID NO:298: (Length of Sequence = 152 Nucleotides)

CCTGAACAGG TAATGAGAAA AATTTACACA CAAGTGATTT TGAAACAGA ATGGGTTGCT TACAAATTAC AGGAAATGTT  
ATAACACAAA CCAGAAGAAT TCAATGAAG GCAATAAGGGAAAT GAAAATTATA AAAGTATCAN GA

SEQ ID NO:299: (Length of Sequence = 374 Nucleotides)

CGATGTTTTT AATGTCATCA CAGTTGTCT CAAAATGAGT GGTGGCATCA TATGTGCGGG AAATAAAGAT CTGGCTTTCT  
GTCCCAAGT CTTTTGTAC CAGGAGTCA CTGATGCTAA CAAATTTCTG TTCAATTGGT TCCAAGAGCT CCAAGCTGG  
TCTGATTTCC TTCTCAGGCT CCTTGGTTTC CACAGTTGTA CTAATATAG CAATGTACTT CCCTTGTGCT GCTACATTGT  
GCGCAAAGGA GATCATGCAG ACGTAGATAT CTGACTTTCC ATTGACTTTG GTTCTGTGGA ATAATGATCT GGCAGGAGTT  
GGCATCATTG GTGTTCTTTG ATGGGGGTGG CTGAGGGATG CAAATAACCT CTTG

SEQ ID NO:300: (Length of Sequence = 365 Nucleotides)

GGCTCACCAA GCTCAGCAAG TACGTGTACT TCTTCGAGGC CTGCGGCTG CTGCAGAAGA TGATTGACAT CTCCCTGGAT  
GGCTTCCTGC TGAATCCGGT GCAGAAGATC TGCAAGTACC CTCTGCAGCT GGCCGAGCTG CTCAAATACA CGCACCCCA  
GCACAGGGAC TTCAAGGATG TTGAAGCCGC CTTCATGCC ATGAAGAAGC TGGCCAGCT CATCAACGAG CGGAAGGGTA  
GACTTGAGAA CATCGACAAG ATTGCTCAGT GGCAGAGCTC CATAGAGGAC TGGGAGGGAG AAGGATCTCT TGGTCAGGAG  
CTCAGAACTC ATCTACTCGG GGGGAGCTGA CCTCGGGTGA CACAG

SEQ ID NO:301: (Length of Sequence = 224 Nucleotides)

GGTATTCAAA CAAATAGCCT GAGAATTING GGGGATCTG AAATAGAGTA CTATGCTATG TTGGCTAAAA CTGGTGTCCA  
TCACTACAGT GGCAATANTA TTGAAGTGG CACAGCATGC GGAAATACT ACAGAGTGTG CACACTGGCT ATCATTGATC  
CAGGTGACTC TGACATCATT AGAAGCATGC CAGANCAGAC TGGTGAAAAG TAAACCTTTT CACG

SEQ ID NO:302: (Length of Sequence = 363 Nucleotides)

AGTTTCACTC TTGTTGCCCC GGCTGGAGTG CAATGGCGTG ATCTCGGCTC ASTGCAATCK GCACCTTCCG GKTTCAGCG  
ATTCTCCTGC CTCAGCCTCC CAAGTAGTTG GGATTACAGG CATGCGCCAC CATGCCCGGC CAATTTTKTA TTTTTCGTAC  
ACACAGGGTT TCTCCATGTT GGTGAGGCTG GTCTCAAACCT CCCAACCTCG GTGATCCGTC CACCTCGGCC TCTCAAAGTG  
CTGGGATTAT AGGCATGAGC CACTGTGTCC GGCCAGCTCA AACAAATTTA ATGCTTCTTT CAAGNCTATT AGAAACCTTT  
AATTGCTTCT TAAGTTTCTC CCCCAACTAT GGAGGAAGCA TAT

SEQ ID NO:303: (Length of Sequence = 253 Nucleotides)

ATGCAGGAAS ATCTACCARG CAAATCGAAA AAAAAAAG GCAGGGGTTG CAATCCATCT CTCTGATAAA ACAGACTTTA  
AACCAACAAR RRTCAAAAGA CACAGAGARG GCCATARCAT AATAGTAAAG CGGATCAATT CAACAAGAAG AGCTAACTAT

CCTAAATATA TATGCACCCA ATACAGGAGC AACTAGATTG ATAAAGCAAG TCCTGGAGGT GCCTACAGAG GAGGCTTAGG  
CTCCACACA TTA

SEQ ID NO:304: (Length of Sequence = 416 Nucleotides)

TTTTTTTGGAG ATGGAGTACT CGCTCTCTTG CCGGGGCTGG AGTGCASTGG CGCGATCTCG GCTCACCTGC AACCCCTGCC  
TCCCCAGTTC AAGAGGTCTT CCTGCCCTCAG CCTCCCGGGT GGCTGGAATT GCAGGCACAC ACCACCATGC CCAGCTGCTT  
TCTTGATATT TTAGTGGAGA CGTGGTTTCA CCATGTTGGC CAGGCTGGTC TTGAGCTCCT GACCTTAAGT GATCCGCCAG  
CCTTGGCCTC CCAAAGTGCT GGGATTACAG GCGTGAGCAC CGTGCCCAAG CTGTTTTTTA ACTGACTTTG GATTTTACTC  
CCTTTCTATG CAAATTTATT TTAGAATCTG TTCCTTAACC TTAGGGGGTT GGGTTAGACA AGTTTCAAGG GAGCCTCAAG  
TGKAAATTGC TTAAGG

SEQ ID NO:305: (Length of Sequence = 223 Nucleotides)

CACACCCAGC TAATTTTTGT ATTTTATAGTA GAGACGGGGT TTCACCATGT TGGCTTGGCT GGTCACGAAC TCCTGGCCTT  
GAGTGATCCC CCTGCCCTCAG CCTCCCAAAG TGCTGGGATT ACAGGTGTGA GTCAGCGTGC CCAGCCGAGA TTTTATTTGT  
TTAATTACAA ATTTTACGTT AACTGATTCT GCACATTTAT ATTTGCACAC TTGTGCTAGT GAG

SEQ ID NO:306: (Length of Sequence = 169 Nucleotides)

GTTTTGCCAC ATTTGGCCAGG CTGGTCTCGA ACTCCCGACC VVGIGAGCCA CCTGCCCTGG CCTCTCAAAG TGCTGGGATT  
ACAGSGGTGA GCACCACGCC CGACCCATAG CTCCTTTACAA CTGCCTTGTA AAGAAAGCAT CATTTGGCAC TGTATAGTATT  
TCTCTTGAA

SEQ ID NO:307: (Length of Sequence = 303 Nucleotides)

GATTTGGTAC AGAGTATGTC AGGAAGACAA CTCAGATTGC CATTTTAAAT AAGTTGTAC ATGAACAATA ATTGGAATCA  
TCAGGTAATT TTTTAAACA AAGGTTCTTC ATTTACTGTT ATGATTGGAA AAAAAATTAG AAAATAAAGT AAGTSCATA  
GGCTAATTAA AAAATAAAAC CTGGCCGGG CGCGGTGGCT TACGCCTATA ATCCAGCAC TTTGGGAGGC CGAGACGGGC  
AGATCAQNG GTCAGGAGAT TGAGACCATC CTGGCTAACA CGGTGAAACC CCATCTGTAC TTG

SEQ ID NO:308: (Length of Sequence = 143 Nucleotides)

ATCTAGGAGG CTGAGGTGGG ATGCCCCAG TACTGGAGGT CAGGGCTGCA GTCAGCCATG ATCATGCCAC TACACTCCAK  
CCTGGGTGAC AGAGTGAGAC CCTCTSTCAA AAAACCTCAG TCAATVCAA CATACAGTAT ATT

SEQ ID NO:309: (Length of Sequence = 199 Nucleotides)

CCCACCTCA TAANCCCCAC TGGGGAGTCT GGGGGCCTCT ATTGCCATGT GCCTGGGAATN ATNATATGCT CATCACTTTA  
TGAAGAATAA AATTGTGNTT TCCTGCCTTA AAGTTACATT CGTTCTTCCG CTCAAATCCT GATCTGGTCC ATTAAAGAGT  
GTTGCGAGAC AAAGTTTCTG AAAGATTAGA GAAGAATCC

SEQ ID NO:310: (Length of Sequence = 426 Nucleotides)

TCCCTGTACC ACCTCTTCTT GAATACGGAG GAAAAGTTCT TTATGGACTG ATCCCTGAGG AATCTTCCA GTTCTTTAT  
CCTAAACTG GTGTAACAGG ACCCTATGTA CTGGAACTG GGCTTATCTT GTACGCTTTA TCCAAAGAAA TATATGTGAT  
TAGCGCAGAG ACCTTCACTG CCTATCAGT ACTAGGTGTA ATGGTCTATG GAATTAAAA ATATGGTCCC TTTGTTGCAG  
ACTTTGCTGA TAACTCAAT GAGCAAAAAC TTGCCCAACT AGAAGAGGCG AAGAAGTTCT TCCATCCAAC ACATCCAGAA

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TGCAATTGGA TACGGAGAAG GTCACAACAG GCACTGTTTT CCAGGAAGCG CCATTTACCG TTTTTMATGG GMCAAAGGGA  
GTTACATTGG CTATGGCTTT TGGGAAG

SEQ ID NO:311: (Length of Sequence = 489 Nucleotides)

TCGACTCGGT CCTGGATGTG GTGAGGAAGG AGTCAGAGAG CTGTGACTGT TTCCAGGGCT TCCAGCTGAC CCACTCTCTG  
GGGGGCGGCA CCGGGTCCCG GATGGGCACC CTGCTCATCA GCAAGATCCG GGAAGAGTAC CCAGACCGCA TCATGAACAC  
CTTCAGCGTC ATGCCCTCAC CCAAGGTGTC AGACACGGTR GTGGAGCCCT ACAACGCCAC CCTMTCCGTC CACCAGCTGG  
TGGAAAACAC AGATGAAACC TACTGCATTG ACAACGAGGC CCTGTATGAC ATCTGCTTCC GCACCCTGAA GCTGACCACC  
CCCACCTAGC GGGACCTCAA CCACCTGGTG TCGGCCACCA TGAGCGGGGT AACACCTGCT TCGGCTTYCC GGGCCAGCTG  
AACGAGACCT GGCAAAGTGG CGGTTGACAT GGTGCCTTTC CTGGGTGAAT TTTTAATGCC CGGTTTGGGC CCTACCAGCC  
GGGGAAGCA

SEQ ID NO:313: (Length of Sequence = 302 Nucleotides)

CTTCTCATGC CAGTCTAATG ATTGTTTTTA GAAAAGGATA TACATTGACC TTCAATGTAA TAAGAAATGC AACACTTTAC  
GGTGTCACAC TGCTAAGATT TATTTCCAAC TTGTCAGACA CAACTATTTT GCGCAATCCA AATCAAAGGG AATCAAGGCT  
GTGAAATCCA CACAGGACAT CAACGCACAC ATAAATGAAA ACTACAGATG TGTACAGAGC AACCATATAC ACACAAATAA  
TGTAAGTACT AAATTCATG AAGTAGCTGT CCAGGGAATA CTTTCCAAT AACCTTCAGC AG

SEQ ID NO:315: (Length of Sequence = 339 Nucleotides)

CGCGTTATTT AAATGTGAA AAATAATGAA TATTAATTTG GAGCATAATA TTAAATACA TGAAAAAGC TGGCTGGGAA  
ATGTTGGCAT GACTTTTCCC AGATGTTAGC ACTGCTTCAA CTTTGTAGAG NGCACTCTGA GTGTAAGTTT ACTAGACTGA  
CATTACTAAA ATCATTTGGT CTATAGAGGC AGGAGAATAC GGGGAATAAG AAAGCCAGTT GCAAGCCAAC AATCTTAAAA  
CTCCTCCTTT TGCCATGGAC TGACGGCATA TTAAATGAGA TCATGCATTT TAAGGNATTA ACAGTGTACA CCACATGTGC  
GTGTTCCAAT AAAAGGAAG

SEQ ID NO:316: (Length of Sequence = 430 Nucleotides)

TAAG TGGTG GTGCTGTCT GATGCTTCC AGTGGGCCCC GACCAGGTCT GGACAATGCC TGGCGCCCGT CCCCCGCCCC  
TCCTCTACAC ACACGCAAGA NTTCGGAGCT CCATGGGGAA CAGAAGCAAG ATATCCGTAA AATCAAAGTC TAGGGGGTGG  
GAATGAAAAG GGAAAGTGA GGAACGGGGA GCCAAACCCA GGAAGACGCC TCTTTTCTTG CACATTCCCT CTCCTTTATA  
TACTCAGCTC TTGGCTGTCT CCAGTATGTA CCCACCTTGG TCCTCCAAGC TGGGAGCCAC TTTTATTAAC ACAATCACAG  
TTTCACAAAC CCCAGGAAGG TTCCATGTGG NGAGAGGTTA AGTTTCGNCC TTGTCCGGGG AATTATGACA CTCAGAATAT  
CCCCTTTGGT GTAAATGGAA GACAACCTTT

SEQ ID NO:317: (Length of Sequence = 317 Nucleotides)

GTTAATGCTT CTNATACCTA ACAAATCTTG GAGGGCAGNC AGCACCAACA CTCAGGGTGC TGGGAAAAGG TGCGTGAGAG  
ATCTGAGGCA TCTCGGGGGC AGGGGAGGGC TGGGAAGGCA GCGTGGCTNG GACCCCTCGCA TCTTAACCTA ACCTTGACCC  
TCTTTCCATG AGCAGAGTTC CGATGCCCTG GAAGCCTGGG AGAGTGGGGA GAGATCCCGG AAAAGGAGAG CAGTGCTCAC  
CCAAAAACAG AAGAGTGAGG CTCCAGGGT GCAGCAGGGG TGGGAGGTGA TCAAGCAGCG TGGGGATTGT AAGCCCG

SEQ ID NO:318: (Length of Sequence = 407 Nucleotides)

CTCGCCCCGC ACCTTCCCCG CCTATGCCCC TGCTGAGAT AGGCCCTTCC CTCCTCCGGG AGCCTCCCGG GCCACGGGAC  
CCTCAACTTC TCCAGCCGCT CCACCCACGC TTCTGGACC GCCTCCTGCA GGCAGGGCTC ACATCCAGCA CTGTCCCTTA

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CAGTCGCCAT GCCCCTGGCG ACCTCAGTGT CCCACTCTGT AAGGGGACAA TGCAAATCCC TTTGCCTCAT AGGGTGCATG  
 TGCCAGINTT GATAAAGTGC TGGCCACAGG CCTTGCCTTC CCAGGGCTCA CAACACTGTG TCCCTGACAC ACCCGTGGGC  
 TGTAGTGATT CTNTTCATGG GGATTTGACT ATAACNGCA GTCAGGAATG AATTTCACAN CATAGCTCAG TACATACACA  
 CATATCT

SEQ ID NO:319: (Length of Sequence = 382 Nucleotides)

CACTGCACAC CTGCGGTGAG GGACAGGACA TGACTAAGCA CAGAGCTTTC TTCTTTTGGAG GCCACGCATG TGGTGCAGAG  
 CGGGACACC TGCATCCACA CAGCCCGGCG CACCTGCTCC TACTTCTGCT TAGCGTGTGA GCAGCTTGGT GACCAGGGTC  
 TCCACCAGGG GGCAGGCCAG GACCGGCTTA CAGCACTTTC TAGGGGTTCCT CTGGTCCCGG GCTGGGACAC ATACAGGGCT  
 TAGTAAAGTT CATAGATGGT AGCTAGGCAG CCCAGGCC CAGGTGACAC CTNTCCCTG CCTGNCCTGT ACTGNCCTGCC  
 TGCAGCACTC CTGGGAATCT TGTACGAAGA CAAGGAGAGA CAGGACTTCA TCTTCACCAT CT

SEQ ID NO:320: (Length of Sequence = 368 Nucleotides)

CATCCGGGGC ATGGACAGCC CCCGGGGTGN CCGCCCGCNC CCCCTCGCC GCGTCGGGTG CNGTTCACCA GGCAGCACCT  
 GGACAGCTCC AGAGTCGGGG AAGCGCCATG GTTCTCTGCC AGAAAGGATG CCGGTGCGGG CCGGCAGATC CTGCCAGGAC  
 TAGGGGCCTT CCCTTTCCAT CAGGAGCCTG CAAGAGAAAC AAGAAAACAT TAGAGGGGCT TCTGTGTAGG GGGAGGGCAA  
 GTTAGAGTCTA TCTTTCCTCT TGTAGGTACT AATTAAACAC CTGCTGINTG CCTGGTACTN TGCAGGGTGG GACAGGCATC  
 ATAGCAACTC ACAGTGGTCC CCTCTTCTTT GTGCCCATAG TCTAGTAG

SEQ ID NO:321: (Length of Sequence = 355 Nucleotides)

GGTGGACTGT GCTGTGAAC TGAGCTGAAC TGGGATCAGG AGAAGGAGAA GTGGGGATTG AGCCCTCAC CTCCACACAC  
 TCCTCTCTGT GCCTGAAATT CCTCCATTAA GCAGCATCGC TGTCCTCTGT AAACACCCAC ATTAAGCCAT TATTCTCTT  
 ATGGCTTNAAG TAGGCGTTAG TCCCTCAGAT CCTTTCCTGC TGAAAGCGGA TCCTGATAGA GAGAAGGGAA GAGAGATGGA  
 TGGNTCTGGG GACGGCAGGC TGGTCCAAGA GTGGGGAGGA AAGATGTCTC TOGGACTCTN GGGNAAGAAA TATTTTCTGG  
 GGAATATGG AGGCACCANA GGCAAGCTCA AGAGG

SEQ ID NO:322: (Length of Sequence = 225 Nucleotides)

CTCTCACTTC TCACCAGGCA CCCACAAAGC CCCAGGCAG CTCCATCTTT CCAATCCANT CCCATTATCC CAATCTCTAC  
 CCCAGGATCC CCCAACTCC TCCCACTTCA CCTCTGCCAC AGACCCGCTC GCCCCCAAAC TTCAGCCINC CCTCATCTGC  
 CCTNACCACC CACAGCCCTT CCTACCTAGC CCTCTCCCGC GACGGGCGCG CCGGCTCCCC ACATT

SEQ ID NO:323: (Length of Sequence = 250 Nucleotides)

CTCTCGCTCC TGTCGGTAC CTTCAGATG CAGGTGACAG CCTGCCCTTC CGTTTTTINTC TTTCAGTCC CGCCTGCCGG  
 ATTGGGTTC AGCCCTGCCC ACACGCCCCG TACATCCCGC CTACACTCAC CGATGTGCGC TAGCAACCGG GCTCGCGGCC  
 AGCATCCGCA ACCGAGTCC CCGCGCTCCA GTTCTCTGGN GGGGAGGGAG AGGGGTGTTG CTTCTCCAGC CCCCTGCAGC  
 CTGGTGTCTT

SEQ ID NO:324: (Length of Sequence = 338 Nucleotides)

GINTTCTTAT GCGGATAAAA TTTCTNAGGT AAGAAAAGTT AGCTCTGAGC AGCCCTCCGC CTGATACTAA TACTTTACCA  
 ATGGAGATTT TCCTTTTCTT TTCTGTTTTT GAGACAGGGT CTCACTTTGT TTCCAGGCT GGAGTGAGT GGTGCCATCA  
 TGGATCACTG CAGCCTCCAT TTCCCTGGCT CAAGCCATCC TCCACCTCA GCCTCCCGAG TAGCTGGGAC TACAAGGTGT

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GCACCACCAC GACTGGCTAA TTTTAAATTT TTINNTAGAG ACGGGGGTTT CCCTATGTTG CCCAGGCTGG CTTGAATTCC  
TGGGCTTCAA GTGATCCT

SEQ ID NO:325: (Length of Sequence = 461 Nucleotides)

ACTCCAGACT CCTCCAGCTG TCATGGATCC TGGGCCAGGG GATCCCGNAC TCACCCAAAG TGGGGCTTTG GGCGGTGGTG  
GGCCGGTTCA GTGGTGAGC GTCTTTTGT CCAGCTCAGA ACCTGCTGCC GSTCCGGTCC CAGAAAAGTT TCTAGCGGCT  
GTAGTTGCCA AAATTAGGCT CTGTACTGC TGGGCTGGCG GTGGGCGCCT CATCCAGCC TTGGAAATCC TTGCCTAGTA  
GCGGAAGTT CTAAACAGCA AAGGATACAA GGCCCTTGA GCGCAAGTAA ATTTCCCTC TTGCAGCAAC AGGTGTCTC  
CAAACCAAGC AGCGTCCAG TGTGTCGGT GGCTGGAGTT CTGCAGTNGG GTGTGGGGAT TGGGAAGGTG CACAGGCAGC  
CGCTTGAGAC CCAGAGGCAG TTTGGGGGAG AGGCCTTGG CTCAGAGGCC TTTCTTTGT T

SEQ ID NO:326: (Length of Sequence = 391 Nucleotides)

GGCCCTCCAG TGTCTGCAG AGAGGCACTC TTGCCAAGTG TCATTGATGA CGCAGCTGAA AACCAGAAAC ATTTCACITT  
CCAGCCACGA GACTGCAGCA ATCTGCTCTT TGGACTGCAC TTAGGGAAAC CGAGGCCAG ATAAGTACC CCTCAAAAGC  
CCCCAGGACG GCAAAATCAA AGGGGCTGAG GTGCTCTGAA CAGCCCCAGC AAATTAAACC ACCTAATTT GCGCTACTCC  
CACTGCCCTG AAGCAGCCTG TGGTGGGAGG TGGGGGTGGA TACAGTGTTA CAAAGAGAAA CCTGAGTTGT AGCCATAGAT  
TGCTAATCAG TAACAAATA TCCCTCTAA CCCAGTCTG CCTGAACCC ACAGGCTCAG GATGGTAAAT A

SEQ ID NO:327: (Length of Sequence = 438 Nucleotides)

TACTGACTGA CCCTGG GATTCCAGC CGAGAGCTT CTGCTCCATT CCGGCAGGAG CTACCTTCCC GAGCCGCGCT  
TTGCTACCT GTAGGAG TAGAGGGAAA TAAGACAGCC CTCTTAGGA TGGTGAGTG GCTAGAAAGA AGCAATCCAC  
GCCAAAGGCT TAGCTCAGT CCTAGACTTA GTAAATGCTC AATAATGTC TGCCATTGTT ATTATTATTT ATNATGCTTC  
CAGCTGGCCT GGAAGGAGGG TTCTGGAGCC AGAAGGGACC TTGGAGAGAC CTCGGTTAAA TCTTAGCGC CATCTTTATT  
TTTAGATGG AGTAACTTGC TCAGSACCTA CATCTAATC TGTGGAGGGG ATGCGGTTT TAAGTAGGAA TTCTTNGACT  
AGACCTCTCA GCAACCCCTT CCINTCCGTG ACAGTGGG

SEQ ID NO:328: (Length of Sequence = 400 Nucleotides)

TTGCCCTCTC GGCTAGAAAG TCTCCCATTA TGGTGCTGTG TCTGCTGGGA CCCACGGGCG GCTGCACAGG GAACCATGTG  
GCCGTGAACC TCAAGTCCNG NCCAGCAGGG GTCAATTGTC TCAGNCCACC CCTCCCTACC CCCAGTATCC TCTCTCTTT  
ATAGATCATC CATTAAGTGC CAGACACTGC AGAAGGCACA TTGACTAATA TTAAATATTA GCCAGCTAC CCTGCTGGGC  
TGTCTTCTT AGAAATGAGG AAGTGGAGGG TTAAGTGGAT TTCTCAAGGT CGTGCAGCTG GTAAATGGCA GAACCAAGAT  
TTGAACCTAG GTGTGCATGA CTTCAAAGGA AGACACCACT GAGGCCTCCT CTANTGGGTC TGCNTCCCTA CCGGCCCTGG

SEQ ID NO:329: (Length of Sequence = 227 Nucleotides)

GGCTGGGCTA AACTCCAGAC GCTGGCCACC TTCATAGGCT GGAGATGACA GAACAGGACA GGAGCCATGG GGCTCCCGGG  
GCGGGTAGGG GTGGGTCTG TTCTTGGCT TGGGGGAGT TACAAGGTA CAGTGGGGCT TGTGAAGGG CAAAGTTCT  
GTAAAGTNGT CCCNACAGGC CAAAGAAACC CCAGAGCCGT CTTTCGACTG ACTACAGCCT GGAAGAG

SEQ ID NO:330: (Length of Sequence = 401 Nucleotides)

TGAAAATATA TCCACTGTTT AGAGGGACAA CAAAGGCAGT TAGACTGTCC TGAACGGTCC TGCCTCAGGC TGAAATTTTT  
GTAGCACTTG ATCAGTTGCA AAGTGATCTT CCTTTAATA TCTATTFTA TCATTGGTA TCTGAAGAGG AAGTGAATT  
GGGGTAAGAA TTTAGTTCT TGCCATAGCA TTTGGGTGGC CAGGGTAAGC CTCAGGGTGG AGGACCCCTA AAGAAACTC



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TAAGGATTTT AAGGAGAGTC AAACCTCTACA TTCATCCAGG CAAACATCTA CTCTTCCATT GATTAAATGNN TCCACTCATC  
CGTGCAACAC ATTCACTCTT TCATCCATCC ATTCATCCAT CTATCCINCA TCAATCCATC CATGTATCTT TCATTTCATCC  
A

SEQ ID NO:331: (Length of Sequence = 322 Nucleotides)

CCCAACGTTG CCCCGCCTTT GTCTCCAGCG GACTGGAAAG AACCCACCAT TGTGAAGCAC AGAAAATTGC CCGCACTCTT  
ATTGGCTAGG TTCCCGGACT TCCGCTCTCG GTTGGTGGTT GGCTTTGCCT GTTACCTGTG TTGCCACTTA CCACTGCTC  
CGCCGAGCCC CAAGGATGGA TCGCTATCCC GTAGCCGGGT GTTCGGAGC GCTGCGGGCA AAGCAGACCG CCTTGGCCCT  
ATTATGGGTT GAGTGGCTCT GTACTCTAGA TCGGCTCTGT CACTTACTAA TGGGCGGTGT TGCCCTCGCG ACTGCAGGTT  
TT

SEQ ID NO:332: (Length of Sequence = 441 Nucleotides)

GGCTCAAGNA ACCTGCACTC TTGCACTCTG GCCTTCTCCC AGGCTGAGCT TTATCATATC ATCAGCAGCA ACCTGGAGAA  
AATGTCAAC CCAAAGGGTG AAGAAAAGCC ATCTATGTAC TGAACCCGGG ACTAGAAGGA AAATAAATGA TCTATATGTT  
GTGTGGATTG CCTTCTGGCG TGTGTCAATC ATTCAAAAAG CATTTATTGA GTGGCACCTA TGTCCAGCCT GAAGATGAAT  
GTGGTGGGAA GGGGTGGGTG TCACAAAGAC AAAGATGACT TAGATGCCCA CTGTAATCTT GACTGTGAGA AAGAGGGGAT  
TCAGGCCCTT TCTCATCCAG TAGTCAATGT GCCATCTCCC CTTCCTTAGT CACCTCTTAT CTTCACCTTAC CTCTTTCTT  
CTCTGCTTA TGTGTTTTCC ATCTAAGGCA AAAAGGGGGG G

SEQ ID NO:333: (Length of Sequence = 354 Nucleotides)

AGAAGCGTAG ACGAGTAGC TTGAGCGCT CTTCGGTGA CCTTTTCCCA GCGCCAGAGG GCCTTAGGGT TGGGGTCCTC  
GCTCAGGCAC AGAGNCCCGA CACCGAGCGG CGGCTTCCCC GGGATCGAGG GAOCGCAOG CCAGAGGAGA CGAAAGGAAC  
CCGGTTCGGA CCAGATCGGA ACCACTGACC ATTGCCCATG GCGGCCCTAG TGAGTNGGGA TTNGCGGGG TTCCGGGGTT  
CGACGGCGA CCTCGGCGAC CCTCACTCA CCGCTTCTC TTTCNCAGG GNCCTAGNAG CCAGAATGTC ACTGAATACG  
TNGTTCGAGT TCCTAAGTAA GTCCCCAGGC CCAT

SEQ ID NO:334: (Length of Sequence = 196 Nucleotides)

CTCCCGCTCC GCACCCGCCT TTCCCGAGCA GGCTACACCT CTCCCTGGCG CATCTTTACT GGAAAGCCGG CAGNGGNGNG  
GGAGAAGTGA GCNCCGTCTC CGGCCTCCT CGGTCTGCT GGCTGAGCGG GGGGATGGCT CCGGAGGGAG ACACTCAGGA  
AACCACCTCC GCCCTTCCCC CATCTTTATC CAGGG

SEQ ID NO:335: (Length of Sequence = 261 Nucleotides)

TCCGAGAGCT GTCTGGGGCC AACGTGCTGG CTGAGTACTA CTGGCTCANA CGCCGCTGC TGGGGGCCCC TGGNAATNTA  
AGTCCTGCCC CGGGCTGTGC CGCCCTCTC CCTGANAGCC CCTGCNTCC TGGGCACAGG GAAGCCTCCA TAGGCTAGTA  
GCATCACAGT GCCAGGCCCA GAGCTTACTG GACTTCCCAA GGTCTTATGG GACTAGGGCT GAGGGTACAC ATCCTGCTTT  
TTTCCAGAAT ATAAGTTTTG G

SEQ ID NO:336: (Length of Sequence = 191 Nucleotides)

CGGAAAAGCG CTTCGGCCAC ATCCAGCAGC AGTAGCAGCC GCAAGGNCOG GGACTCGAAG GCCCACCGNA GNCGGACTAA  
GTCGTCCAAG GAGCCGCTT CGGCCTACAA GGAACCGNCC AAGGCCTACC GGGAGGACAA GACCGAGCCT AAGGCCTACA  
GGCGGGGGCG GTCCNTCAGC CCACTGGGAG G

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SEQ ID NO:337: (Length of Sequence = 279 Nucleotides)

CCCTAGGGCT CCTCTGACT CCTTCCAAC CCAGGTCTG CAGCCAGGT AAAGCCAGAG CAGACTNAAG GCAAGTTTTTC  
 AGGAAACCAG GNGGCTTGAT CCAGACTCAC AATCTCCCTG CAAAAGTKTT CAGAACACAC CGCACAACA CACACACGNC  
 TCACAAAAC TCTGAATGTC GCTCTGCTC CACCTTCTCC AGTCACGAA AGACCTCGGC CTGAATTGGA GCCCGCAGCC  
 GTAGCTGTCC CTNTCCACCT GTNGCCCTCG CGGAGGCTT

SEQ ID NO:338: (Length of Sequence = 339 Nucleotides)

CCACNCGTGG AGGGAGGCAA AGGGGCAGCA AGAGAGAGGG AGGAAGCCCC ACTCTTTTAA AACAAACCAGA TCTCTTGTRA  
 ACTGAGAACT CCCITATCAC CAAGGGGAGG GTGCTAGACC ATTCTAGAGG GTTCGGCTC CATGGGCCAA TCCCCTCCCA  
 CCAGGCCAC CTCCAACACT GGAAATAAC TCCAGCAGG CCCGCTCCA GCACTGGAAA TAATGCTTCA GCGTGAGACT  
 GGAAGGGGAC TGATGGAGCC TGGWTGTTT TCCCGCCCA GSTCTMACG TGAACCGTAA TCCCCAATGC TGGAGGCGGG  
 GCCTGGTGGG AGGTGACTG

SEQ ID NO:339: (Length of Sequence = 334 Nucleotides)

GGCACCGGGC TGTCCTNGT CCAGCTAGCC TCACAGGGAG TGGCCTCTAA AACNGGCGG CCCACNCCAT TTGGAAGCTG  
 TCCCGGGTTT TCCGTGAAGT CCTCCCGGC TGTTGCTCTC TGGATGGTCT GGACCAACAG CTGGGGATG AGGGGAGGCT  
 CGGGGGCAAG GGCAGGAGCC CCAGCCAGG GCTGGGGGTN TGCTGATCG AAGAGCTGCA CCACCCNGTA GCTGGCCAGG  
 TGAGTATNGG CGTCCACCAG GTGCAGACAC ACATTCTTTT CCTTACAGC CTCCTTACCC TGGAGTTTAT AGCCAAACGT  
 GAGGTGATC CAAT

SEQ ID NO:340: (Length of Sequence = 450 Nucleotides)

GGCCCCACAA TCCCCTTCTG GCTCCGGGGA CGGGCGGGC GGGCGAGCG GGCGGAAATA ATTTTNTGTT TGGTCGTCTC  
 TGCCCCAGTC CCTTCGCCG GGGACGGCA GACGGGAGAA GTTGGGGAA GCGGGAAGCA GGAGCGGGAG CGCCCGGCC  
 TGGCAGCAT AGGGCGGCG AGAGGGCAG AGCAGGGATT GAGCACCTAC TGINTGCCTT CACGCTTTAC AAAAGGATTT  
 TCGTTGATG TTCACTACAG CCCTGCCCG GGGTACTGA TGCCCCATTT ACAGAGGGAC AAGCCGATT TCGGAGAGGT  
 GAAGTCACTC GCGGAAAGTC GCACGCCAG GTCTGCGTG ACACCCTAAA GCAGTGTTC GTTACCCCGG GGAGAGCGCG  
 ATGAACITGA ACCACTTGTG GCTTGGTTC CTGCTCTTGC TCGTTTTTTT

SEQ ID NO:341: (Length of Sequence = 192 Nucleotides)

TTCAAACCT GCGGCACGG CTGTCCCTC GAGGCCGGC CCTTCCCT TCCGGAGAGC CCACCGCTGG GTCTTAAAGC  
 CCACCGCTGG GTCTTAAAGC CGCCGGGTN TTACCCAGG ACGGGCTG GAAACCCNG TCTTCTTAG CTCTTGGNTT  
 ACTTCTGGA GACTTCTTAA AACGAGAGGA GA

SEQ ID NO:342: (Length of Sequence = 229 Nucleotides)

GTGGTAACCT TTTTAAAAA CATAAATACC ATACAATCA TCCTTTTAAA GTGTGTAAT CAGTGGTTTT TGGTATATTC  
 AGTGTTCAC AGTCATACC ACTAATCCA GAATATTTT ATCAGNCCA CGGCTGTATC TCCATTTCT CTCTCCCKG  
 CAGATCTG CAACCGCTGA TCTACTTCT GTCTCTTACA GACTTATCTG TTCTGGACAT TTCACATAA

SEQ ID NO:343: (Length of Sequence = 229 Nucleotides)

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TGCTCCAGGA AATTGGAGTT CNAGCTGAAG GCCTTGCGNC ACTCCGNGCA CTCGTAGGGC TTCTNGCCCG TINTCGGTGCG  
TCGGTGCTGC ACCAGCGTGG TGCTTCGNCC GAAGACTTGC CGCAGTCCGG GCAGCGGAAG GGCTTCAGGC CGCTGTGTGT  
CTCCTGGTGG TGGATGAGCT GCGAGTNCGC GCGGAAGGCC TTNCCGCACT NCCTGCAAGC GTAGGGCTT

SEQ ID NO:344: (Length of Sequence = 227 Nucleotides)

TCGSCAGATC ANATTACCCC TTGCCAGAGG TCAGGSCCCC CGGCCTTGGC GGCGGGCCAG AAGCGTGA CTGGCTSCTG  
GAATGCATGC CCTTAAACAT CTCTAGACTA GGGGCAGTKT CCGCCAACCA TGGAGGCCCT CCATCACCAT CCTGCGAGCA  
TCACCACNT CCAACCCCCA TGTCCCACCC TGGNENTTCC ATACCTGTAG TAAGAGAGCA AACCATT

SEQ ID NO:345: (Length of Sequence = 249 Nucleotides)

GGCAATGTT GTCACAGATG TGTGCAGATT TTSCAGAGGA CATAAGTTGG CTGTGAGGWA GAACACAGAG GTTSCCTATT  
TTTTAGGCAG GAAAGAAAGC CTGCACTTTT CTGTGTGTGT GTNTCAATAA ATCTGAATAA CACCTTGAAA GGGTTAAAAA  
GCTGAGCACC AGGTGTTTTT TTTCCACTTT CCAGAGTAAT TTAAGCACAC NSCAAAGTTA TCTCCCTTCC TTCCCCACGA  
GCCAGCTTA

SEQ ID NO:346: (Length of Sequence = 356 Nucleotides)

ACCTAGTCCC GCAGCCGCTG CAGCCGCTGG GTTGGCGGAA GAGCTGGACG CCGAGCTAGA GGAAGAGGCA GAGCTGGACA  
CAGTGGCGGC GTGAATTGGC CACTNCTTTC GGAGCCCGAN CTCTCCCGCA CTGGAGAGGA CTTCTTCTTG GCTGGGCGGC  
TCTTGGTTCC GCTCCCGCTC TGCTGCTGCT GGCGGCATTT NGCGCGGCGG TTCTTGAACC AGACCTGCAG TGGGCGGAT  
GGGGGAGAGT GGGTCAAAGG GAGCTAGGGG AGCTTNTTGC TCCACCGNCC CGTGGACCCA ACTCCCGGTC CAGAATATCG  
CAATCCTTTC TCACCGAGGC CTTGACCCCT TCCTGT

SEQ ID NO:347: (Length of Sequence = 155 Nucleotides)

GCCGCGGTGC GTCGGATGCC CAGCTCGCGT CCAGACCCGC GGGATGCAGA CCGGTTTCAG TCAGGCTTGA GGGCTGCTCC  
GCATAGACCA ACGTCCGGGG AAGGCACACA GTGGCCGAGG GCCCGCGCGC TTKGGCTACG GCTGTATATG TATCT

SEQ ID NO:348: (Length of Sequence = 362 Nucleotides)

AATTCCGATT TAACTGATTG TCTATTCTG CTCATACATT TCAAGTTTAA ATGCAAGCAT AAAATGTTTA TCAACAAATC  
TAGAGAGCAC TTGGATTTIN AATTTTCTG TGATCACAGT AAGGAGCATA AAAAAGAGTA TCTNCTGTTA CACAAGGCCT  
GINTCTCTT TACATCTTCA GACTTAAATT CTGTAGAAGG TAACAGCTTT GTATTAGGA CAGAAGCTTA GTGGTCACAA  
ACAAAAATA AACTGAAAT ACAATTCGGG NATTANTGAT ACTGTGTGTC TCAAAGGATA CCTGAACAT TACANINACT  
AATAATTTGG GCAATGAGAT TCCNGGTGN TTCAACTTTT TG

SEQ ID NO:349: (Length of Sequence = 342 Nucleotides)

AATTCCTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTCAAGTAT CACAATGTTT ATTGATAGAT ACAAGTATAT  
AAAATCAGGG CATGANCATG ACTTGATAAA TTAAGTAGAC TTAATTTCAA TACTATAATA GNGGGACCA ATTCAAATTC  
TCACCATTTG TTTACACCC ACAAAAACCA CTTCAAGGGC ATTAACGNTC TCTCAAACT GNTCAGTTTT GTGCAAGTAA  
ACCATGTTTC TTTTAAAAAG ACTTGTGCAC TTGCCAGGC TCAAGTTTAT TAAATCTAG GCACATAAAG NCCATTACTA  
GAGGTAGGAA ATACAGGCAA TT

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SEQ ID NO:350: (Length of Sequence = 384 Nucleotides)

GATCTGTGCT AGCTGTGAGG CAGCTCTGGA ACGTGAAGAG CTGTTTGTTT TGAACCGTGA ACAAACCTGT GTTTTGAGTT  
 TAGCTGACAT TAAAGAAAAA AGTTTCATCAC GTGACTGTTA ATGTAAACCT GGTATTATAA ATAACATTTT AAAACAGGAG  
 AAATCTGGTA AGTTGTITAGG NITCTAAATT CCTTTTAGTC TGTTCACTGA GATATTAAAT TTCAGTAGAC AGAACCCAAA  
 AAGAGATTTC ATTTCTTTCT AATCACTTTG GCTTCTNTCT NTTTTNTTAA GTAGGTAAAA ACCTTCCTTG GTGGGCACT  
 AAGCAGGATG CAGCCAATTA GTTCATGAAC CCAGCTGCGG ACGTGAAGGC TTAAATCTA AGGA

SEQ ID NO:351: (Length of Sequence = 305 Nucleotides)

ATCCTGACCC TCCCCACTGC AAGCCAGGG AGCCCCAGCC CAAGATGGCC AGCCTGAAAC TGTGGGCCAG GGCTCCTCTT  
 GTGGCCATGT ACCCAGGGCT GGCTGGCCTG CCATTTCCTT CTCCCAGGAG ACAGCCGTTT TTCTGCAACC ACACCCCGTG  
 CCTAGCCACA ACCCCAGGCT GCAGCTGCTC AGAAGCTCCA GGCATTTTGT TTCTGGTGAC CGCCCTAAT GGGATATCGG  
 TGATCACTGG TCCACCCCTC CTGTCAGGSC TTTTCTGGGG GCTGCTCTTG GAAATGAAGT CTAA

SEQ ID NO:352: (Length of Sequence = 270 Nucleotides)

GAAATTACCC ATGGTCATAT CTAGCCTACA AAGAAGAGAA AATACAGTGA TTCAAGTTTC ATTGTATTCC TCTCATTGAT  
 ATATTTATCA ACCTTCCAAT TGAAGGAAGT GTCTTCTAGG CCTTTACAAA GAATGTAACC AGGGTTTAGG TATACAAGTT  
 GCATATGATA AATCTGTCAT GTTCTATAT AAATCTGTCC ATATTCCTCT TCTGAAATGC ATTATTTTTT GGGGAAATTA  
 AAATGTGATG CAAAGATCCT TATACTTTGT

SEQ ID NO:353: (Length of Sequence = 195 Nucleotides)

GTGTGATTCC ATTTATATGA AATGNCCAGA ACAGGGAAAA CCTATTINAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT  
 GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TNATTGCTTC ACGGGGTGAT GACAGAATGT NCCAGAACGT GACAGAGGTG  
 GTGCCTACAC AACTTTNTGG NTGTACTAAA TGCCG

SEQ ID NO:354: (Length of Sequence = 388 Nucleotides)

GCCAATTTT TTATTTTTGT AGAGATGGAG TCTCCCAATG TTGCCAGGC TGGTCTTAAA CTCTAGGCT CAAGGGATCC  
 TCCCAGCTGG GCCTCCCAA GTGCTGGGAT GATAGGCATG AACCACCATT CCCAGCCCAT TTCTTTTTTC CCTTTGCACA  
 GTACCAGATA TATGGTTGGT ACTGCAGAAA TAATTTCCCC CTGCCCTCTA CATTGATCAT TTGATGACCA AATAGTGTC  
 GTCTAGCCAC TTATTTATGA TTGTACAAA ACATTCCGCT TTCTGAGGTA GACAGTGATA TTCTGAAGCC ATCAGTAAGA  
 GTAATTTTTC AGTNTGTG AAAGTGGNCA TTCTTTGTGT AAAGGTCAGC CTGTCAAGGA AATAGCAT

SEQ ID NO:355: (Length of Sequence = 288 Nucleotides)

TAAAGTGAAG TATTGGGAAA GGAACATCT CACTCTGATA GATTGAATT TCTATTCTT GCTCTGTGAC AAAACCTGA  
 GTTGATATGT GATCAGACAT TTACAAGGCC CTGCATTCTA CCTGGAATG GCTATAGTGG TGTGAGCTG CTGTGAGATG  
 ATTTACTGCA ATTTGTCACT TTTTGAACCT GTTCCAAAAT AGTCTGCTGA CAGCCCTTCC CTTATGAAA ACATCTCTCC  
 TTTTCCAGTT AAAAAACAG TCAAAAACA CAAAAAAGG CCACCTCC

SEQ ID NO:356: (Length of Sequence = 401 Nucleotides)

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GGAAATTAGG TTGGTTATTA ACATGTATAG ATGGAACTGG GGTGAAAAAA AAAAGGAAAT GGGAAATGGAG TGGAAAGGGTT  
GGGTGGGAGA GACACTTCAC AGTATTCITT TTGTTTGGAC TTGGGAAATG TTAATATTTT ATAACTTAA AAAAATGCAA  
AAAAAAATA TCAAACTAG GTAGGAAGGA GAACAAAATG AATATAACC AGAAAGGAAT AANCTAACA CATTTTGAGT  
GAATCACAAA GCCAAACCA AAAAGAGCTA ATTTAAGTCA CTTTAAACT TGGTGTAA CTACCTACAC TCAGTCTAAA  
AACGNAAT AAGGGTAAAG AAATAGTGA ACTCTAGTTA GTGGGCTCT TTCTTTACAG CAGTATGGG ATGGCAACCT  
G

SEQ ID NO:357: (Length of Sequence = 275 Nucleotides)

CAGACAGTGG ATAATAACA CCTCATTAGG AAACCGATCT CAGAATGANC TCTGGAGTAT GAAAAGATC ATTTCTTTT  
GTCCTGTAA CCTAGCATTC CTCTAGGCT TCCTCTCTT TAATGAACC ACAGCTTAGC TCATGTATTC TTTTATTAAC  
ACCCTGCTCT CATGTCCATA AGATTCAGGA ATTTAGGAAA TNAGGCTGGT TTGAAGAGGG TAGAAAGCAA TAAAGGCAGN  
AAAAATAAG NCTAAATCA GGGGAAGATG TATTT

SEQ ID NO:358: (Length of Sequence = 314 Nucleotides)

GTGAAGGAAG TATGAAACT GAGACTAATA TTATGAAGTC TTTTITTAAT TCCTTATCTT ATTGCCCAT TTTAACCCTT  
TGGTGTGTA AATGGAAAAT AATATNCTC TTCGCGATAG ATAATATGTC AATAACCAA AGGTGGCTT AACCAATAAT  
TGGCCCACT TTAATTTATT ACCTAAAGA TATATAAATT ANCTAATCTA AAATTAAATG CAATTTGCT ATGACTTAA  
GTGTCANTAA TCCTGTATAA GNGATCCNNT TTATGCAGTC ACTTAGGCAT GAAGTTGGCA ATTCATCTAA ACTT

SEQ ID NO:359: (Length of Sequence = 372 Nucleotides)

CAAGAGAGAC ATAGCAGGCA TTGAAACAAT GGAAATGCCC ACATAGCAGA AGGGAGTGAG GGGATCCAAA CTACAAGAGC  
GACAAATCA ACTGTGGATC CAGAGACGAA AAAATGTTCT GTAGTGCAA GGTAATCTGG TGAGATGAAA AAAAAAGAAC  
CATTTTAGA AAAANGGAAT ATTAGAATA TIGAAGTAA TATCATAGT CATCTATTA CAAAGGCATT AACTCTTCC  
TATCAATAGA ATGTACCACT TAAAANTTT TTAGTAGGAA TATATCTTT ATTTTATTA CAGAAATCAN GGGACAAAGA  
GGATTGATC CATCCATACT TCCTACTCTT ATTGGGTTTG TCAAAATGTA GG

SEQ ID NO:360: (Length of Sequence = 395 Nucleotides)

GCATCTTTT GATACCCACC TAATAAGAC AATCTCTAAA ACCAAATAAT AGGCTATGAA ATGTATTGTG AGTNCCTATT  
TCATCAAGA CAGAGCTTAC CTTAAGTCT CCAGCTGAGA CAGTTGGTTT TATCTTCTG AAAGCAGTTT GTCAAGTGT  
TTCAAGTAA TCAAAAGATC GGTAAATCAA TCCCTTAGCG AATTGGATTA GACACTCTCA TTCAAATGG CAGTTTATG  
CTTACTCATT GTCTGAATA ANCTTAAATA CTTTATGCTA TCTTCTGCT CCAATTATTA TGTAATCACT GGGNCCTTAG  
TATCTGCTT TAGNNCATAT AAAATCACTT NCAGGTATTT TCCATCAGG ACACAGAGGC AGGCACAAAT TAACC

SEQ ID NO:361: (Length of Sequence = 298 Nucleotides)

ATTTTTTGT GGGGAGAACA TTAAAGACCA TTCAATGTC ATGATGAAAG CTAATGGGAG AAGGCTTTT TNCIACAAA  
ATTTCITTA TTTTNCAC TTATTGAGG TTATAATTGA TATTAAAAA CTGTACAGAT TTAATGTGTA CAGTCTAATG  
AGTTGGGACA TATGCTTACA CCNTGATGC TGTTACCACA GGCAAGGTAA TACACATATC CGTCACCTGC AAGAGTTTCT  
GTGTTCCCN NTGTTTCTCA TTTGNTTTT TTCAAAAT TACTTTATAG GGTATAG

SEQ ID NO:362: (Length of Sequence = 437 Nucleotides)

168

ATGCTGGAAG TGATTCTGC AGCTCAGGAT TTTTTTTTA AGCTACATTG AAAATATAGG TTTATTTTTT GTNCAGGTTT  
 TNCITTTATA TTTTTTINCT GCACAAAGGA GGAGGATTTT CCACTTACTC ATATCGAGGC CAGATTTTTA AAGCCAGCTA  
 AGGCAGCATC AGCTGTGCGG GATTTAAAGC CTATAGCTCA GCTGAAAAA AAGGTGGGGT GGCCTTTCAT GTAATGGGAC  
 ACGATGCCCT TCTTGCTGAA CGACTGGAAA GAGCACAAGG AGCACITTTT CTTCTCCACT GCCCGCCGGA GTTCTCGCT  
 CAGCTGAGGG GAGTCGTCTT TGGGCGGGGA TGGGATGATC ACTTTGTTGG GCTTNTCGCT GATGGTCTG GAGGCTGCCA  
 AGAAGTTGAG GTGTAATACG CATCAATGTC CGTGGCG

SEQ ID NO:363: (Length of Sequence = 449 Nucleotides)

TGATTGAAG TAAGCTTTC ATGCTTCACT TAGGGTGGGA AATTTTAAAT ATCAGAGCTT TCTTTGTTAG CAGCATATAG  
 TTATGCAATT TATTTAAATC TGCACTGCCA ATCTTTTTT GATGGGTGTG CTTAGACCAC ACATTTAAGA TAATTATTAA  
 TATGTTAGAA CCGAATATAT TTTNATGATT AGTTTTTATG TGTCAAITTG ACTGAATTAA GAGATGCCCA GACAGGTGGT  
 TAAACATTA TTNCITGGGA TGTITGTGAG GATGTTTCCA GAAAGGCTA GCATTTGANT CAGCAGACTG AGTAAAGAAG  
 ATAAAGATAA TACTTGTCTAT GTGTACAGGC ATCATCCAAT CTGCTCAGGA CCCCAATAGA ACAAAGGT GGAGGGAGAG  
 TGAATTATGT CTACCCCTT GAGCTTGGGA CAGCCATCTT TTCATGCCC

SEQ ID NO:364: (Length of Sequence = 282 Nucleotides)

GACTGTGTAA ATACACTTTA TTTTCCATTT TNCCTGCTG GCGACATGT GAACAGGCAG TGTGCAAAAT GGTGGCGGGC  
 AGTGTAGGGG GCGTGTGGAG AGCCCCGTGG GTGCTGCCC CGGTCCCCAG GCTTCGTAACT ACTGAAAAGT GGGCAGCTAG  
 GAAGCGGGGA CGGAGCAGGG GTCCCCACCC AGGAAGCGCC AGGAGATTN CTGTGAACGC TACTCTACTG GAGGCTCCGG  
 GAGCACCGAG NGGGGCAGTC CCCAGGTCA TGAGGCCCGG GG

SEQ ID NO:365: (Length of Sequence = 349 Nucleotides)

TTCAAGCATT TCTCTGCTT CAGCCTCCCA AGTAGCTGGG ATTTCAAGCAC CTGCCACCAC GCCCAGCTGA TTTTGTATT  
 TTNAGTCAAG ATGAGATTTT TGCCATGTTG GCGGGCTGG TCTTGAATC CTGACCTCAA ATGATCCGCC TGCCCTCAGCC  
 TCTTAAAGTG CTGGGATTAT AGGCATGAGC CACACANCT GGNCTTTTTN TTCTGTTCT AACTGTCCC TTTTATTTCC  
 CTATGGAGCA TCTACTGAGC CCCAGCCGAG AGTAGAAACA AACCTGCTGG CTGCTCTNAA GGCCTTATA GTCCAGTTA  
 GGGGNGACG GGTCACTTAA CCACCTAGT

SEQ ID NO:366: (Length of Sequence = 366 Nucleotides)

ATGCAAAGGA ACAATGGTGT TGGCAAAGTC TTCTTTGAAT ATCAGAGACT GAGTCAATAA AAAAAATAGT AGAAAGGTGG  
 CTTTTACTAT TGACAAAAGC CGGGGTCAA AAAAGTAGTT TAAGTCTTAA GNCCTGAATAT GCATTAAAGT ATGCAGGTAG  
 CAAAGATGTA ATAAATTTCC TTAAAAAAG AAATTAAAGT TTTATTTAGA ATCAATTTTA CCNGTCATTG TAATTGACCC  
 NCTGAGNAT TACAATAAGC AAGAGGAAAT TAAGGTGTTT TGCAAGAGCT GTATTTATAT TACNGTTTTT TAAAAACCAT  
 TTTCTGAATT ATCGTAATTA AAGCTCTCCC AACTCGTTTA AGTCAG

SEQ ID NO:367: (Length of Sequence = 391 Nucleotides)

GCAAAAACAA ACAACAAAC CTTTAAGTAC AGTAGTCCA AAACACACTG CTAAAGTTAT GAAATAATTG TGGATCAITT  
 CAAGTAAAAA TTATTAAAGG AGCAATAATT AACCACAAGG GGGCATATAT ATATATNCNC CTTAGATTCC AGCAGAAAGA  
 CTAGTTTAA GTAGTAACAT GCACGTGAA GTATTCTACA TTTTCAGTCA CTTAACTTT CCTCTCTCAG ATGGCTACAA  
 CTTTTTAATA TTCGAGGTNT ATTTTATATC TAAGTAAAG GATTCCAGAA TACTCTGCC CTGCAAAACA GTAGTGTTTT

AGAAGNCTCT NGGAAGTGT GCTGTTTACC CTTTAGCAAA GNGNTACAAG AGCTATTAGT TGTAATAATA C

SEQ ID NO:368: (Length of Sequence = 370 Nucleotides)

ATTTCCTTC TGCACTCGGT TCTCTGCTC CCCATTTACA TGGTTTACTT CATTTTCTC TTCATCCATT GGATTCACAT  
GTGTTCTAGG CCAATATTCC AGGNGTGTG GAGTAAAAG TCCTCTTAA TTCAATTTTG GNTCTGACCC ATCAGGGCTG  
CTGAAACCAG CATCTTTTGC AGAAACCCAG GCAGCAAAAC AATCACTTTC ATCCAAAGTA ATAGTTAACA TCCTGTTTT  
TAAGTCTACT GAGAACCAAT TTGGCACATA CACCAITTTA AATCTTINCT TAATTTATC TTCAAATCC ACTTTGCCA  
GATCTTCAAC TTTACATGGC TTCAATACAT CCAATATGN CACATTATTA

SEQ ID NO:369: (Length of Sequence = 315 Nucleotides)

GACAGGTATT CTTTAGAAGT TTTTGTTTA CTTATGTTTT NCTCTTTAC ATCTCCTTGT GAATTTCTGT CCCATTTGA  
AGTCTCTCCT TGTCTCGAC CAAGATCCCC TTGATGTTCT GTAGCCAAAG ACTGAGAAA AGAGTTATTC TGAATGATGT  
AGAGGTTGAT AAGTCTGGTA AGAACTGTT GGACATACTC CAAGCAGCAC TGCATTGCAG TCTTTTGGGC TGTCTTCCTA  
CTCGGGTTG CTGTCCCCTG AGTGACTACG GAAGGGTCT GGATGATGGT TTCTTCAGAT CCCACAGTG ATGCT

SEQ ID NO:370: (Length of Sequence = 442 Nucleotides)

AACACTTTTA CACTGCTGGC CTAATTTGTA GATATCTCA AGAAGATTAT GAGTCATTCT CACTACCGGA ATCTGTCTCT  
CTATTTTNTT TACCAATGGG TGCACCATG AATGTTGGCC ATCAAATAGC AAATACCCCT TGCTGTATT TCCTACTININ  
GTTTTAACTG GAGCCTCAGC TGAAAAGSIT TATGGTCTG CTATTCAGTT TTATGAACCA TACTCTGAGG AGAATCTCAC  
AGAAAAGCAG AGACTTCTTT TGGGTTTAA ATCAGCAGAT GGAAGTCTG ATAGTTCCAA AACAATTCAT ACTAACAAAT  
GCATCTGTCT TCTTTCTCAC TGGGCTTTTT TTTGATGGCA TTCAGGAAGT TTCTGACTTT TNCGTATCG TTAATTCAT  
CTCTGGGGCT CATGTCTTC CAATTGAGGA GGATAATTCC CA

SEQ ID NO:371: (Length of Sequence = 441 Nucleotides)

GACAAAGTCA CTCAGGGTCT ATTTACCAT ACCCCAAAGT AAAGGCCCAA ACTCCACCGG GGCCAAGTNT TTCTGGNTCA  
AAGTCACCAT GTCCCCAAGA GAAGTCTAAA GACTCACTAG TTCAAAGTTG CCTTGGNTCC CTCTCTCTCT GTGCAGGAGT  
AAAATCTAGC ACACCACCAG GCGAGAGCTA TTTTGGTGTG TCATCTCTGC AACTGAAAGG ACAATCTCAA ACTTCACCAG  
ACCACAGATC TGATACTTCA AGTCCAGAAG TGAGACAGAG TCATTAGAA TCACCATCTC TGCAGAGCAA ATCTCAAACA  
TCACCTAAGG GAGGTGGTTC CAGGCTTCA TCTCCAGTCA CTTAGCTTGG CATCCAGATC TCCANTAAGG NCAAGATAGA  
GGTGAGTTCT CAGCGAGTCC TATGTTGAAA TCTTGAATT T

SEQ ID NO:372: (Length of Sequence = 362 Nucleotides)

GAGGTATTGT TGTTACTGGG AGGTGAAGG GAACACAAAT TCAGTTATAA GTCTTTTTTG AATACTAAGA GGGGAATAAT  
TAGGGAAGCT AAGAGGGGAA TAATTAGGAG AAGAAAAAA AACTTCAAAC AATTTTCCCT GTACATGAT TTACTTGCA  
TTTATAAACT GATTTTTTTT TCTAAGCACT CCTTTGATAA TGATTAAGTG TGGGGTACA TTATTNAGG GTGCTTAAT  
ATTTAAGGTG ACTTAAAAAC CTCACACAG TTAATCCGA ACTGTGAAAA TTTCTCATCT TATCATCCCT CTGTTACTAT  
CAATTTTCT CACGGTACAG ATTCTTTTAT AATTACTTCA TT

SEQ ID NO:373: (Length of Sequence = 306 Nucleotides)

ATCTTTTGTG CGTGTGTGTG TGTTGTGTG TGTTGTGTG TGTTGTGTG TGTTGTGTG TGTTGTGTG AGTTTCTTTG TAAATTCTGG  
ATATTAGTTT CTGTAGAT GAATAGTTT TGAATATGTT CTCCCATTC ACAGGTGGC TCTTCATTCT GTTGATTGTT  
TCCNTGATG TGCAAAACT TTNACTTTA ATATAGTTCT ATTTGTTTAA TTCTGTTTTT CTACCCATG CTCTGAGAT

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CTTAGCCATA AAATGTTTGC CTAGAACAAT GCCCTGGAGT GTTCCCTG AGTTTCTTC TGGTAG

SEQ ID NO:374: (Length of Sequence = 278 Nucleotides)

GGGTTTGGT TGAGGTTTCT AACTCATTAT CCAAGATATT TNCITTCAG CCAGCAGAAA GAAAAAGGAG AAGAGCTGCC  
ACCCCTTGTG TCCAGGATGA TCTCTTNTG AAATCCTTGA TTTAATTATA TCTGCATGAC CCTTNNCCCA ACTAAGGTTA  
TATCCACAST TACCGGGGGT TAGCACTGGG ACATCCCTTA TTTTANGAAC ATGTCTCAGA AAGTTGCACA AAAAAGTTCT  
ACTACATCCC ATTGCCCAAT ACTTCTTACA TGATGACA

SEQ ID NO:375: (Length of Sequence = 321 Nucleotides)

GGTGACAGTA TTTTTGTGG TTTCTGTAGC TCCAGCCCT CAGAAGGGAC GCTACAGTT GGCAGCTATG GCTGTACCCC  
TCAGTCATTG CCCAAGTCC AGCATCCCTC CCATGAAGTG CTCAAGGAAA ATGGCTTCAC ACAACACGTC TACCATAAGT  
ATCGTAGGCG CTGCCTTAAT GSTAAGAAST GTGGGGGGCA GGAGATGAGC CTCTGGGGCC GTTATTTAGA CCCAGAGTAT  
AAGAGTTGGG GGATACGGGG ATAGGTGACT CTTTTCTCTG ACTTCAGAGC AAAAAAAGA CATGACATTA TAGCAAGAAA  
G

SEQ ID NO:376: (Length of Sequence = 337 Nucleotides)

GGAAAAATTA CAGCATGACT ACATATGTTA GGAAAAAAT ATCTAAAATC AATTAACTAA GCTTCCATCT TAGGAACTA  
AAAAAGAAG AGCAATTAA ATCCAAAGTA AGAAGAAGAA AATAAATAAT AAAAATTAGA GCAGAGAGAA ATGAAATTAT  
GAACAGGAAA TCAATTTTAA AAATAAATGA AACCAAAAGC TGGTTCCTTG AATCAATTAA TAAATTTGAT AAGCCTCTAG  
CCAGACTAAG AAAAAAGAGG TAGGGCACA ATTACTAATA TCATAAGTCA AAGAGGGGAC ACCCTACAG ATCCCATGGA  
TATTAAAGG ATAATAA

SEQ ID NO:377: (Length of Sequence = 455 Nucleotides)

GTTACAATTG AGAAACATA TTTAATAAAT CATTTGCAAT TTINATAATG TTTCAAGCCC ATTCTTTGTT GATAGCCTCC  
ACATTATAT GGTAAAGTCA TTGTGCTGT GTTCTTACC TATGACATTA TTTINATATC CCTTCATTG TGGATCTTAA  
GATGTGTCAG AAGGTCATT CTTGTACCCC AATACAGATT CACTTCCTTT AGCTGCCTTT NCTAGCACCA ATATGCTTTA  
AAAAAAATG CGCAACAAC AAGCAGTGAC AGCGGCCAAT TCCTCGAATG TCCAGATTAA TAACTGTAGC ATGCTAAAGA  
AAGGTGTGTG TAAATAGCTG GAGATGGTAT ATGGTCCAGA GTCCAGCATA AAATTATTTT CTTTCTGAGG CATTCCTTCC  
ATCCCCCTAA CCCGATACA TGCATTAGGA ATGTAGCAA ACCCTTCGGG GAAC

SEQ ID NO:378: (Length of Sequence = 349 Nucleotides)

GATGGTCACG GGTGTTTATT ACTGGACATG CTCTATGCTT ACTTGCTTGA AAACGCTCCA TTAGAAAATN AACTCTGAAA  
ACTATATGCC CAATGCTAAT AGTGGGTATT TATTGGTAAC ACTCTTTATC AGGTGCTATG ATTGTTGATG GCTTTATTIN  
CINCITCATA TTINCTATAA TTINCTACAAT GAACATGTAT GTATAATCAG ACAAAGAGC CAAGAAATAT CCATAAGTTT  
TNTGGTTCAT TCATTTCATCC CATAAATACT TGCTGAGCAC CTGCTGTAAAG CCAGGCTCCG AGCCGGCTGC TGGGTGGAGT  
GCCGCACCCC AGGGAACGGT CAGCCCTCG

SEQ ID NO:379: (Length of Sequence = 421 Nucleotides)

ATTTTGAATC ATATTTTACT TATAGGTTTG CTGTATATAC TGATTAAACT TCTGAACCTA AAGATTCTCT ATAATTAAAC  
TAGCACAAAT ATAATCTGTC CCTTACCCAC ATTGTAAGAA TGCTGGTGG GGGAAATCCA ATATTGACCT TCACATTCCA  
CATGGAAAAT CTTTGTCCCC AGAGTGCAAT TAGGGTGATT AAAAATAAGC AGCTTTTGTG AGTCTCAAGT TTGTCCCCA  
ACAAGCAGC ATCAGCAACT GGAAATTTGT CAGACATGCA AATTATCCAG TCCCACCTGA GACTTCAGCC CAGATCTATG



GATCAAAAAT TTTGGGGGTG ACCCTGGGCA ATATGGGCTT TAATAAGNCC CTAGGATGGG TTCTGATGCA TGCTCCAAAT  
TTGNGGATCA TTGNINCTNT G

SEQ ID NO:380: (Length of Sequence = 311 Nucleotides)

ATTTTNAGAT GGAGTCTCAC TCTGTGCCCC AGGCTGGAGT GCAGTGCCAT GATCTCGGCT CACTGCAACC TCCACCTCCC  
AGGTTCAAGC AATCCTTCTG CCTCAGCTTC CCCAGTAGCT GGGATTACAG GCACCTGGCT AATTTTTTTT TTTTTTTTTT  
TTTTGAGATG AAGTCTTGCT CAGTGGCCAG GNTGGAGTGC AGTGGTGTGA TCCTGACTCA CTGCAGCCTC TGCCTTCCGT  
GTTCAAGCGA TCCTCTGCC TCAGCCTCCT GAGTAGCTGG GACTACAGGC ATGCACTACC ACACTTAGCT A

SEQ ID NO:381: (Length of Sequence = 442 Nucleotides)

AATCTGTGAA CATATATTTT NATTTATCTT AAATACCTAA GAGTGAAATT NTGGTTTCAT ATGTGGGTAT ATATTCAACT  
TTGTAGAAT CTACCAAAAT GATTTTCCAA GTATATGTAT AATGTTATGG TCATCAGANC TACATGATAG TTAGAGTTGG  
TTAACAATACT CACTGCAATG GATTGACTTT CCTGTGATTC AGCTATCCCA CTCTTAGGCG TATACCCAAG AGAAACTCAT  
AATGTCCTTG TGTGAGCTT GTATGCTAAT GATTTTAGTA GTATTTTTTG TAATAGCCAN AAGGTGGAAA CANTGAAAAC  
TTTCACGGAA ATGATTAATG AATTAACAAA ATATTATATA TCTATATATG ATCCATTAAT CAATGAAANG GANTGAAGTG  
GTATACAAGA AACACCACAG GTTAACCTT GAAAGTATAT TA

SEQ ID NO:382: (Length of Sequence = 337 Nucleotides)

AACAGACTTT GGAGCCANTC CCATGTGAGT TTGAGTCTCA GAGTGACTCT GGGCAAGTNA CTTAGGCTTT CTGAGACTCA  
CTTTCCTCCT TTATAAATCA GGAAGAATAA TCCATTGCTC ATTGAGTTGT TAATNAGACA TAAATGAGAT AGTGTATCTA  
AAATGTGATT TGTTAAGTCT AATACGNAAT AGATGCCAT TTGAGTGTTC CTNATACTCA GGATGGTTCT TGGGATATAT  
TTNCCCATGG AACAAAAAGC AGACTACTCA TGACCACTCG GATTTTATGT TCAGCCACAT TAGGGCTCTT ATGGCCTGAC  
CTGAAGACCT ACCATTT

SEQ ID NO:383: (Length of Sequence = 421 Nucleotides)

GTGAAACTGA AGAAGACCAC GACAAACGAT CGCTCAGCCC CTOGCTTTTC TTAGGTTTCAC AAGAAATGCG CCGGTGGGGA  
ATGAACINNT TCATTAAATAA AACCTAATTT GTCTTGATCC ATTCCACTCT ATAATAAAAC AAAAGATTTT NTAGGCAACT  
CGGAATATAG CTCTTTTGAA AGTACTCGAC ACCTTTAGAT AAGAATTAAA ACCAACCTAT GTAACGACA TAATCTTGAT  
CINTTAATTT GIAAATATIG ACANTMINCT TTCTGCACAT TTTAATCTTA GTTTCCCTTT TGATTTTINCT GAAGGTGCCA  
AATTCCATTT AACTINCTTA CAAGTCTTTG TAAAATTTTA AATGCATAAA GGGGGGTTGG GGGCAGGGG ACCNCGGANG  
TAGTTTAATT TTCGGAAAGG G

SEQ ID NO:384: (Length of Sequence = 420 Nucleotides)

GGACTCCGTT CCCAAGAATA AGTTTTGCTT GGGCGGAAAG TATGTGGTTC ATCCGAAAAA AAAGAAATCA ATGATTTGTG  
GCAGTCTTC ATGTGCTTTT GGGCATTINC ATATCTTCCT TGGAGAAATA TCAATTAGGA TCCATTGCCG TATATACATA  
TATTAAAAAT ATGGGTCATG TATTATGGCT CATACCTGTA ATCCCAATGC TTTTGGATGT TGAGGCGGGA GNTACCTG  
AGGTTAGGAG TTCGAGACCA GCCTGACCAA CGTGGTGAAC CCTGTCTCTA CTAAAAATAC AAAAGTTAGC CAGGCATGGT  
GGCATGCACC TGTAGTCCCA GCTACCCAGG AGGCTGAGAC AGGAGGAATT GCTTGAACCC ANGAGGCAGA GNTTCCAGT  
GAGCTNAGGA TTGTGCCACT

SEQ ID NO:385: (Length of Sequence = 404 Nucleotides)

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GTGACAAATG TTAAGAAATT GTGTGTCAAG CAAAATACTT TAGAGGCCAA TGGGCCACAT GTTTTAAATA TCAAGAGATT  
 ACACACAAA TTTNTTTTCT AGCTTCTTTT GAAAAATCAG AATTGGGAAG ATGTATTTCAT GAGTGACTGC TGCCCCCTTT  
 GGTGGGACT CGTTCCTTCA GGTTCATTAC ATGGTCATCA ATAACCATTT CCTTGGTCCC TGCTTTTGTC TTGCTGGNC  
 TCTAAGCATT TGAATTTTAA GTATTATAAG AAAACTTAAT ACTTINCTAT CAGTCACCAC ATACATGTGT TTCTATCTGT  
 ACTACGNTT ATTAAAAGCN TTTTATCAAT AGCNCATT TTGGAGGGG GGATTTCAC TGGTGCTNG ACTAGCAAGG  
 AATT

SEQ ID NO:386: (Length of Sequence = 267 Nucleotides)

GTCTTGTTGA CATTACGTG GTATCTTAG AGCAACACA GAGTGGTGC ATAAGCTGCA GTGTTTGTAGT ATCGGTGGGA  
 CTGTGGCATG GGTAGAGGA GTACAGTCG CAAACTGATG GCCAGCTCT GACCTCCAG GCAAGTGGAC TCCGAGGAGT  
 ACCAGCAGAT CTTCCCATG GGTGGGGA GGGCTCTGG GAGAGTCAGT GGGCAGGAGA GGGTCAGCTG TCGAGGCTCC  
 AGGGCCAGC CCGTGCCTT CCGCTCT

SEQ ID NO:387: (Length of Sequence = 384 Nucleotides)

ATTTTAAATG ACATTTTATT TAGGCCAGGG GACCAGGTAA CATTATTTT AGGAGGAGAG CAAAAGGTGT TATATTACTG  
 CTTCTAATTA CCTAGAAGGA AAGCATTTC TACACTGCCA TTATGATTGG CTGCAGCAGT TCAACCTGGC TCTCGGAATC  
 TGCCATTAGC TTGACAGCAT ACAGAGCACC ATATCAGGGT TACTATGGGA AGACTCTATT GTGGCATCAG AAACACAAAA  
 AACACTGGAT ACAGTTAGTT TCTGTTGACA GTTTCAGAAG AAAATCCAC AGATTGGACA GGCTGCCCTGC TGAAAGGTT  
 GTCCTACAC ACAGCATGCC CTGAACCTG GGAATGAAGT TACCCCTATC TGTGGTGATC AGGA

SEQ ID NO:388: (Length of Sequence = 345 Nucleotides)

CTAAGATCAA ATGCAGCAA AAGTGGTGA TTTTACCACC TGTTGTGTAAG TCTGGGTGA TAACTTTACC GTAAATCACC  
 TAGAACACAG GCTAGCCGAA TGGGGTGTG TGGTATGGCA ATATCCCGAG AGCTAACCTG GGGCTGGGGC AATGTTCTGT  
 GGCTGCTGCA CTTGCCCTTA ACAGGCCAGT TTAAAACGTC CAGTCTCAG GGCCACATTC TCCAGGACAC AGCAGGGAGC  
 TCACAGTAGC TCAAGACCCG GCCCAGCCTC CATCCCCAGC CTTGGAGCTG TCAGTGCTCC CAAAGGCTGA AAGAATTCCG  
 TCTTGGCTGA GTGGACAGCC CCTT

SEQ ID NO:389: (Length of Sequence = 156 Nucleotides)

TAACTGCCC CAGCAGTGCA TGCAGGAAGA CTTCCTGGTG CATGAGGTGA CCAATCTGCC GGTGACAGAA GNACTGATTG  
 AGCGGGAGAA TGCAGCCAG CTAAGAAGT GCGGGGAAAC GCGGGGGNG CTGCAGTATC GGCCCTCAG GCGACT

SEQ ID NO:390: (Length of Sequence = 364 Nucleotides)

GAGTCTGCT CTGTACCCCA GGCTGGAGTG CAATGGCATG ATCTCGGCTC ACTGCAACCT CGGCTCCCG GTTCAAGTG  
 ATTCTCTGC CTCAGCCTCC CGAGTAGCTG AGATTACAGG CAGTGCCAC CACGCTGGC TAATTTGTGA TTTTCAGTAG  
 AGATGAGGTT TTGCCATGTT GGCCAGGCTG GGCTCAAAT CTTGACCTCA GATGACCCG CTGCTCAGC CTCCCAAAGT  
 TCTGGGATTA CAGGCATGAG CCACTGCACC CAGCCCAACA CTGGGATTCT TTTATCCGCT GGCTGGCTCT TCCGAGTTG  
 AATTGTGTGA CTTCTTCCC TATCTGAGGC CCAGTTTTTC TTCA

SEQ ID NO:391: (Length of Sequence = 325 Nucleotides)

GAGTGTCCAG ATGATGGCAG TGATGGCCCA TCTGGAGCG CTGCTGTAAG GACACTGGCT GCAGCAGGG AGGCACAGCC  
 AGGCTGCGC ACTAGGCAGA GCTGGTGTG GAGCCAGGAG CAGATGAGAG CCCCCTTC TACCAAGTTG GCAGTGAGA  
 AGGCCGCACT CCGGGTGCT GATGCCGAGT TCAGTCCAG ACCCTGGCAT CCTGGGCTN TCAGGGGCCC AGGAAGCCCC

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CCACCCCTGC AGGNTTCAAA GGGCCTGCTT CCCACTCCTT GGCCTTTCCC TCCTCCTGGG AACCATTCTG GGGCAGAGCA  
AAGCT

SEQ ID NO:392: (Length of Sequence = 371 Nucleotides)

ACATCCACAC AAGTACAAGA ATACAGAAGC TTCTCTAGTC AGGATGCACT AAGCACCTAA TGAGTAAACA AACTTCAGCA  
TATCTTCATT GTTCTCATGG TATTAATTIG AAGATACTTA CCTTCGAACCT AAATCTGGTT TTAGAAGAGC TGCTTGTGTG  
TCAGCTCCAA CTGGTGGGA TACAGGCTGT AAACAGTACA GACATAAAAC TTGCTATGAT AACAGTAAAA TTCAAGCTAA  
ATATACAATT TGTACTATT CAGAAAACAC GATAGTTTIG GTTACCTTGC AAACCTGGTA GGAATATCTA TGTATTGAA  
TGTCTGTATC AATCCTATTA TTAACATTAT TACCAAGGT AAATAAAATT T

SEQ ID NO:393: (Length of Sequence = 404 Nucleotides)

CCMTTATGTA GCTTCTCTGA GGTGAAACCA CTTCTTTTIG ACCATCTAGC GCANTCINTC TTTACATCAA CCATTTATTT  
CAAGTGTAGT GTGCTTCAGA GTCTGAAAGA GCTATTGCAG AATTGGCTGT TGTGGCTTTC TATGGACATT CACATGAAAC  
CTGTACAAA CAGTCCCTCTA GAGACAACCT TGGGTGGATC CATGAACCTT GTGTCTAAAC TGATCCACTA TGTAGGGTGG  
CTATCCACTA CTGCAATGCG CTTGGAGAGC AACATACTT TCTTGTCTGA CTTTATTTTIG GATTTCTATG AGAAGGTGTG  
TGACATATAT ATAAATNATA ACCTTCCATT AGTGGGTATT GTTCTCTCT GGGGATCCTT CTATTCTGCA CTCTCAGCC  
TGGG

SEQ ID NO:394: (Length of Sequence = 416 Nucleotides)

GCCACACACT GGAGAGGGAG AGCTAGAGAG TGAGACAGCA GGGGAGCTGA GGGTGAATGG CTGCTGTITAG AAGCCCTGGA  
GACAGCCTGA GGTGAGAGCC CAGCCCCACT CTTGGCTGTG TGATCTTGAG CAGGGCTGT TAACTTCACIA GGACTTGGTT  
TCGGTTTCTC ATAGAGAATA GGTACAGTGT GAATTAAATA TATATAGCTT GAATAAAGTG CCCAGCTTGT GGGTAGCTGC  
TGCCATCATC ATCACCATCA CCATCATCAC CATCACCATC ATCATCATCA TCATCATCAT CATCATCATC ATCATCATCA  
TCTCAGGCAC AGGGGCTTTA AGGACAACAT GCCAGTTTA AGGANGAACA CAACTCTCTT CATTATATAGC GNCCTCCAT  
CAGTGAGTAG ACGCTT

SEQ ID NO:395: (Length of Sequence = 315 Nucleotides)

AGAGATCAAA TGTCTTAAAC ATTATGGAAT AGGAGTGTAT GACTGACTAA CATCCAGTAA TCATTAGGGA AAACAAACAT  
GAGTGAGGNC AACTGAAATA ATTATGATAC AATTAAAGGT GGTAGGTTAC ATTTGTATAG TTTCTTAAAA TATGCATTAT  
TCCACATGAT CAGAAATATA AAANGANCTA GACAGATACT GGTAGAGAGA CAATTAAATT AAATTGTGTA CATATTGCTT  
GGNGCAAGCA TTCAAGTTGA GTGCTTAATG TGTATCGGTG ACTGCACTGT GCAAATAAAT TTGGGGTTAG TAAGA

SEQ ID NO:396: (Length of Sequence = 409 Nucleotides)

CTCCAGTTCT CACGTIAGGG TGCTTCTTC CCGGCAGAG TTTTTCGAGC TCATGAAGGT GGACTGCCTG GAAAGTACTC  
TAGAAAAGTC ACTCCAAGCA AAGTTTCCTT CAAATCTCAA GGTCTCCATT CTCTTAGACT TCACGCGGGG CTCACGAGGC  
CGGAAGAACT CCGCACAAT GCTGCTCCCA CTCTGCGGA GGTTCOCAGA GCAGGTCCGA GTCTCCCTCT TTCACAGCC  
GCACCTCCGT GGGCTGCTTC GGCTCCTCAT CCTGAGCGC TTCAACGAGA CCATCGGCCT CCAGCACATT AAGGTGTACC  
TCTTCGACAA CAGGGINATC TTGAGCGGTG CAAACCTGAG TGACTCCTAC TTTNACCAAC CGTCAGACCG NTACGTGTTT  
CTGCAAGGA

SEQ ID NO:397: (Length of Sequence = 414 Nucleotides)

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ACAAGCTGTG TGACCATAGG CAAGTTTGAC CTTTCTGAGC TGCCATTTTC TCATGGTAAA AGASAGATAC TAGAGGAACC  
 TGCCCTCACAG GATTGTTCATG GAGAATAGAG GAGATGATAC AAGTGAAGCA CTAGGCAGCA CCATACCTGG AACTAAGGGA  
 AAGCCCCAG TCAATGTTCA GTATTGTTAC ACTTGCCAGA TTGTGAAAGA GCGCAGGCAA CCCTTGAGTT GAGCTCAACG  
 CTGGAGCCAA GATCAATGAC AGAAGGATTT TGTTTTGAAA CAGCAACTAA TGACCAGAGA GAGGAAATGG GTCATGAAGC  
 TCCATGGTGC CTTTCATGAA AATGAAATGT AAGGGCGTGA TTCAGGAAAA AGGGACCACG ATCAATACCA GCAGACTCTT  
 CCTATGCAC TGGG

SEQ ID NO:398: (Length of Sequence = 400 Nucleotides)

CATCAAGCTG GGAATGCCCT AAAGTGGGG CGTGAGGAAG AGAAGGGGTG ATACCTAGAG GCTGGGGTAT CTCTGTCCCA  
 AGGAGACAAA CTATAACAAG ACCCAGCAAC TGAAGGGTTA ACACCTAGCA CAGACGTATA CCTCCAGNT CCTAGCTGCA  
 TTTCTAATTC TGCTTCATCT ATGCTTGAGC ACTACTTGTT GTTAAATATA CTTAATATCA CTCTTAGCTA ATTTCTCTTA  
 TGTAGATTTT TATTTATTTT TGAGGGCAAC CCAACTTCCA GGCTCTTGGG AGGAAATAGA CTGCAGCCCC TAAGTGTGAT  
 CAATACTTAA TTATAACAAT AATCACTAAT AATAACTTGT GCTGCTTCAT TGTAACATAA ATGTACACTT TTACATTTTT

SEQ ID NO:399: (Length of Sequence = 324 Nucleotides)

AAATATTTAC AATTTTACAC CTTCAGGAAG GCTCCAAAAT ATAAACACTG TACCTCTCCC TAGAGAAAAA AAAATTATTC  
 TTCTCTTCAA AAACAGGAAT ACATTCAATT TTTCTCACTG TGTGAATCAA GTAATTATAC AAATAACAT CTGAAACATT  
 TTCTTTTAA ATATATTTAT ATAATATATA TTNTAACAG CTTTACAAAT AAAGGCAACG GTCTTTTCT AATTTTCATG  
 CCTCTCAACA GAAGGGTACA TGATGCTCCC TGAATCCAG GNTATTTTT TNCTCTCTAT GGTACTTTGT ATTTCACTTT  
 ACTT

SEQ ID NO:400: (Length of Sequence = 388 Nucleotides)

ATTAAATCTG AGTTTGTGTT GAGCATCTTT CAACATGTAC CATATTTATG ACAATTCTCT TCCATAGGAT CTATCTGTNC  
 TGCAACAAGT ATTGATCTTA CAGTAAATTT TTTCACAAT TCATTAGATT CTATGCTCTT TTTCTGCTA GGAATTTTGT  
 TGCAGGTAGC TATCTCTTGC CCTAGATTAT TCTCCTTGTT TAGTGTCTGA TTCTTAACT GGCTCTAGA TTTCCAGATT  
 TCTTCCGGTA CAGACTTTCT CTTTGCAAGT NCTTCCATCT CTAATCTTTG AGATTAATCT TCTTTTGAAA TGTCTGCTG  
 CTCTACTCTT GTATGCTTG GNCCACGTT CAAGCTTCCC ATCTAGCAA ACCAGGGTT CTAATATT

SEQ ID NO:401: (Length of Sequence = 339 Nucleotides)

GTTTATGCT CAAAAACAAG AATTCAGAAG CAAAGGTGGA GAGACTGTGG GTTGGGGAGA TGGCAGGAAG GGGCAAGGC  
 CTTGTCCCAG CTCTCCCTTT TGCTCTCTT CTGACCTCC TGGCCGGAGT CAGGCCTAGG GCCAGGGCAT CTGGGAGGGG  
 GGCACCTTCG TGGCCAAGGG AACAGTAGAG CTATCGGGG CAGTCTTGA GGGGTGCCCT GGCAGGAGG GGCTGCAAGA  
 TTINCAGGA GGCAGAGTTC CCTTCCAGA ATCCAAAAGC CGGTAGGGCG GGGGGCAAGG CCCCCTGTTT GGCAACTNAG  
 AAGAGGCGGC TTTTGGGCG

SEQ ID NO:402: (Length of Sequence = 400 Nucleotides)

TGTCCAGTGT ATGAGGACGT CCCAGCGAGA AATGAAAGGT TCTATGTTTA TGAAAATAAA AAGGAAGCAT TGCAAGCTGT  
 CAAGATGATC AAAGGTCTCC GATTTAAAGC TTTTCTTACC AGAGAAGACG CTGAGAAATT TGCTAGAGGA ATTTGTGATT  
 ATTTCCCTTC TCCAAGCAAA ACGTCTTAC CACTGTCTCC TATGAAACA GCTCCACTCT TTAGCAATGA CAGGTTGAAA  
 GATGGTTTGT GCTTGTGGA ATCAGAAACA GTCAACAAAG AGCGAGCGAA CAGTTACAAA AATCCCCGCA CGCAGGACCT  
 CACCGCCAAG CTTTCGGAAA AGCTGTNGAG GAAAGGGAGG AGGAGGACAN CTTTCTGAC CTATCTGGG AGCAACCCCC

SEQ ID NO:403: (Length of Sequence = 416 Nucleotides)

AGTTGACTGC TCTGATATGG AGAGACCTGT TAGTCTTGTA TATAGTGCCC AGCCGGAAAA AGCATCTCTT GAAGGTTAGG  
GCATTTTGIG AGGAGAGCTC TAGGGCTATA TCAGTCTGGA GGTATGATCT CTGATAAAGA TCATAATTCT CATCTCAGTA  
ATCTTCTTTA GAACAAAACA TTCTTCATTG TAAGCTTCTC ATTAAGTGAA GGCCACCTGA TCTGAGATTT TGGCTCTTAG  
AATACTCTTT NCTGIGTCTC AATCCTCATA TGGCTTACCT CTGAAATATA GAATATATTT CCTTGIGTAG CCTGGTAGAG  
TTGGGTTTIG TTTTGTTTTT CAAACAGTAA CTTTATTG ATGTGAAAAC TTCCAGATTT CTGAGATGCC GCCTTACCAG  
TCTTAAGGTT GATTTT

SEQ ID NO:404: (Length of Sequence = 368 Nucleotides)

CCTCTNACTC ATTGTGATGA GTAGGGCGGA GGGCTTCACT GCCTCANTTT CCCCAACTTT GGACCTTAAA TCCTCTCCTG  
ATGCCTCTCA GCCCAGCCAG GAAGGAGAGC TAAGACCAAG AGGGATTATA CAGATGCAGG ACACACAGCC TTGTCTCAG  
ACCCCCAAG TCTGAGAGAA GCAAAACACT CACCTTGAGA GCCCTCGGAC TTGGAGGTGA GGTGCAGAAC CCAGGCTGGG  
TGTTGCTGA GGGGTGGTGG GGGTGGGTGG TGCTGGGTGG CTGGCCTGGG AATACTTTTC TTAAGCTAAG GCTGGGGCTT  
AGGGGAGGGC CAGAGGAAGG GTAAATAGTT TGCTGGGGG GGTGCTGG

SEQ ID NO:405: (Length of Sequence = 395 Nucleotides)

GACAGGTCCT CACTCTTACC ACAAAGCTCA AGTCAGCTTG GCCTCTCAAG TGGAGAGATA ATCGTTCTAT AGCAAGAAGT  
ACAAAGATTG TCTGCAGACA AAACCAGCTA GCCAAGGTTT CACAACATGT GTACACGTAT AAGTCTGNTG GATCAGAAGA  
AATATGTACC CGGAATCAG ATGTAGCCAG CCCACATACT AACAAACATC AAAGCAAGCC TAGTCAGATT GAGTCCCAT  
TGAACAATCT TTATAAAGGT TTCTTCATGT TATTTACAAT TCAAAGTAAA TTTACTTTAT AAGCAGCTAG GGAATTCTT  
TATTTAGTAA TGTCTTACA TAAAGTTTC ACATAACTGG CTTCTGTCCA AACCATGGAT ACTTGAGCTT TGTTG

SEQ ID NO:406: (Length of Sequence = 358 Nucleotides)

GATACCTTAA TCTAAATTTT ATCTTAATTT TTATTTTAT TTCAATGTCT AAATTTTAT CTAAATTTT TNCTAGCTCT  
TTATTACACC AAGACAGCTT CACATTTTAA TTTATATATT GTACATCTCA TGTAAAGNAT TACCGTATAT AAGCTAGTGT  
CATAACTTAA GTAGCCACAT TCATTCAGTA TGTTTTATGT TTTCTCTCTG ACTGGATCTC TGATACATTC TTTCTGTTC  
TAGCTGCTTT TATGCAAAAG GGCATTATAT GTTTGTCAAT CAACCAGGCT TCTGTGACTG TTTAGAAGGA ATTATGTAA  
TATATAATCC NGTGGCCTGT TTCATTGCG CCATGTTT

SEQ ID NO:407: (Length of Sequence = 294 Nucleotides)

CIGTGTATAT TTAGTATCTT TNAITAAGAA GACTGGTTGA TATTTGCCTT CAGCTAATTT ATAGAAAGGA TGATCATCAA  
TGTCTCTAGT TTTCTTCTAA GTGGCTGTCT TGTGCAGGTA CATATAAAAA TNCAACTATA CAAATAGCTG GACAGTTGAG  
TCTCAACTAT GAAAATCTTT TCTGGGATCA AGATCTAAGA AGTTGGTGTG TGTATGAGTG CAACCCATCA TTCTATCCCC  
TAAAAATCTG GGGTTTCTCA GCCCAAACAT TCNCACTAGT AAAGTCAAGT TTCA

SEQ ID NO:408: (Length of Sequence = 367 Nucleotides)

GGCAAGGAAA GAGAGCTTTA AATTGAAAGG TTAATTTCTT AAGAGGAACC TGGGCTGAAT GACTGCAGTG TTATACCCCTC  
CAATCTTTGC AGGTGGGCAT GGAACACTGC TTGTATCACT CTGTGCACGG TATAAATCCA TATATCCACA AAAACACACA  
TCCATCCATC AACATATACA TGGTTTGGGA TGAGCAGGTC AATAGTTTTG AGAGGGAGTT TGINCCTTTT TTTTCTCAT  
TATACTCTTA AATTGTTGTC AGTTATCAAA CAAACAAACA GANAATTTGT TTGGAAAAAC CTTGCATACG CCTTTTCTTA  
TCAAGTGCTT TAAAATATAG NCTAAATACA CACAGGCTTG AGGCAGA

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SEQ ID NO:409: (Length of Sequence = 233 Nucleotides)

AAGAGACAGG GNCCTATTCT GTCAACCTGG CTGGACTGCA ATGGTGTGAT CACAACCTAC TGCAGCCTTG AACTCCTGGA  
 CTCAAGCANT CCTNCCACCC CAGCCTCCTG AGCAGTTAGG ACTACAGATG GGTGCCACCA TGCCACAGCTA ATTTCTAAAT  
 TTTTTTTAGA GACAGGGTCT TGCTATATTA CCCAGGCTGG TCTCAAACCT CCTGGGCTCA AGTGATCCTC CTT

SEQ ID NO:410: (Length of Sequence = 295 Nucleotides)

GACAGGGGGT GGGGAATTCT ACTCCATGGT ATCTTCAGAG CTAGGATAAT GCTCCTTATG CAATCCCACT GCATATGACC  
 ATGGCAGTAG AACAAATTCA ATTACTACAC TGGATGCGTT AAGTGTGCTT TCCTAGCAGA AAGCACCAGG GTGGAGTCAA  
 CAGTTCACAT GCTAATACTT GGAAGTATTT CTAGAAGGGG GTGCTCAATA GAGGGCAGAC ATGATGCAAG NNCTTCATAC  
 TAGAAAGGTG TCGTGTGTGT GCATGCACAG CTGGATGGGG GCACACAGGA GCAAG

SEQ ID NO:411: (Length of Sequence = 304 Nucleotides)

AATAAAAAGA CCATTAACCTT AAAGTGGTGT TAAATGCTTT GTAAAGCTGA GATCTAAATG GGGACAAGGC AGGTGGAGGG  
 GAGGCCAGTG TACATGTAAA TGCCACAGC CCAGCAITGG GTTCCCTCC CAAGGNCCCA GCACCAACCT CTGAGCCCAA  
 GACCTTGCTT GAAAACAAGC AGATACCGAT TGNITCATCC TATTTATGGA CATGTAGGTC TAGTTGCATT TTCACTNGGG  
 GGAGGGGGGA AGGTGAATTA TGGTAACTTT TAATGATCTA TTCAGGCAGT AGAGCTCTTA AGGG

SEQ ID NO:412: (Length of Sequence = 250 Nucleotides)

CAGGTGGGCA CTATCACGCC CGGATAATTT TTTTGTITT TAGTAGAGAC GGGGTTTCAA CATGCTGCTC AGGCTGGTCT  
 CAACTACCGA CCTCGTGATC CGTCCACCGC GGCTCCCAA AGTGTGGGA TCACAGGCGT GAGCACCTCT CCTGGNCACA  
 GGINGAGACC CTTTCTATAT AAGAAAGAGA AAAATGTCTC TNANTCACA GAGAATGCTA ACAACGGGGG AAAGCACAGA  
 CACAAACCTG

SEQ ID NO:413: (Length of Sequence = 337 Nucleotides)

GTACTGGGAC AAGGGAAGGC AATCACAAC AACTGCCCTC AGGAAGAACT CAGTCCCTGA CTGTAGTGTG TCTTCGGGGG  
 AACCAATGCC ACCNCTCTC ATCCCCAGA CGGGCGAGGG GCTGCACCTT TAAAGCAGGC CATTGGGCCT TCCGGGCTCC  
 AGGGCCAGCC CACCCGNTC CCGCTGGTGG ATCTTCTGCT GCTGCAGGAG GTGCTGCTTC TGGACAAAGC TCTTNTCACA  
 CTCAGTGCAG CTGTAGGGCC GNTCACCCGT NTGGATGCGC TGGTNCGNA CCAAGTCAGA TGGGTGACTG AAGCTCTTGC  
 CACAAGTAAC CACAGAT

SEQ ID NO:414: (Length of Sequence = 304 Nucleotides)

GGTTTAAGAA CTGCGTTTGT GNGCCCAATC TTGGTGAAA AATATTTTGT GGTCACTCTT GAAAAAATC CTTTTCAAGG  
 CAGACAGCAT TTTAATGCTT TGTCTGTTTT TCCTGTGTTG TCAGCTCTGN CACCAGCCTG AAAGATTTAA AAATNCAAAT  
 TAATGGAGGN TTATTTGTCC TMTACTCAGG TCACATTCTT GGGTTTAAAT GAAGNGACAG ATGCTGCTCA TATACAGGAT  
 TTAGCTGCAG TTTCTTTGGA ACTTCCAGAT ATTCTGAATT CACTCCACTT CTGCACTCTA AATG

SEQ ID NO:415: (Length of Sequence = 315 Nucleotides)

CGTTGTGGAG TGGGTGTCTT TGGATAGAAG GAGTGAGGAA CTGGGGGAGG AAGGCTGGG GGATCCCTTG GCGGGGCTAC  
 TTCTGGGGCC CGENATGGAC ACCTGGNAGC TGCTGCTNTT GTTGGGGTCC TGGCAGGGGT GTGGTGTGGC CCTCACCCT  
 CTGNTCACCT GCTCCTTCTT NACAGTGCTT GGAGAAGTTC CCTGTNATCC AGCACTTTCA AAGTTGGGNA GCCTNCTGCC  
 CATCCATCCT GTCACGTGGG GCTAGGAGGG GNCAAGCCGA AGAGCCACCC ANGNACANT TCCTGTGCTT GCCTT

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SEQ ID NO:416: (Length of Sequence = 343 Nucleotides)

GTATTTCAG TGTTTTATTT GCTTCTGTG GTGTCAAATT TGGGGTCTCC TAGAGCCCAG CCCAGGCAG AATCCGGCAT  
 ATCCTTCTCC GCCTGGGGGG CCCGGGACAC AGGAGTTTCA GAAAAGGCAC TGGCAAAAGT NCTAGGGCGG GGGTCAGGGA  
 GAAGCCACAC TGAGCCTGGA GGGACCGGGC CCTCCTTCGG CGGCAGAAAA CACAGTCACC TTINGCAGGG AAGGGTTTTT  
 NCCTAGAAAG AATTTAAGA CAAGATAAAA ACCTGAGATG TTAGAGGAGC CCCAGAACC AAGCCGGTGC TNCCTGGGC  
 AANCAGAGAG TGAACTCGGC TTT

SEQ ID NO:417: (Length of Sequence = 202 Nucleotides)

TATTTCTCTG TGAAGGGG GAAATAAAA GGAATAAAAT AAAAACGGCA CAGTTGACAC ACAAAAAAA ACCAATGATG  
 GGGAGGACGG GAGGTGGAGA AGTAAATGGG GGAGGGGNTC CCATTACAGC AGCAGGATCC AGTACCCCGG GATGCTCACA  
 TCTNCTCCIN ACGTGGGCGG TGTAGCCCCCT TCTCCCAAG GT

SEQ ID NO:418: (Length of Sequence = 299 Nucleotides)

CACCAATTGG CTGCAGAGCT GTCTTCAGGA TCATAGGCCA CTGCCAGAGT CTTGGAGAGA GGGAGAGATG GAGAGGAAGG  
 GAGTGAGCTT CGTGGTCTG ATTCTGGCT CAACGACGCA GGAACCTCAG GTTCAAAAGC AGCTGACAAG AGCCCAGAGA  
 CCGTCTTCTT GCGTCCGGC AGAGCCTTCT GGTGGCCCGA CACCCAGGCA NGGAGGGAAG GCCCTGAAAT CCGTTTTTIN  
 TGGCAAGATT NGTTCCAAG AGGAGATAAT GGCTCAATTT TGTCTCCCA AGTTGATCA

SEQ ID NO:419: (Length of Sequence = 223 Nucleotides)

ATTGTTGGGA AGGTAAACATT TTCCATGGT TTINATTTIN CCCAAAAGTA TTTATGIATT GATTATTTG GNTCTGACTC  
 AGGCGACGTA CTGTAAGACG ATATTACTTT AATCATCTC ACATCAGTAT TTATGGAATA GCCACAGGTG CCTCATCCTT  
 TAGTAGGAGT TAATTATACA TTINCTGGCC GAGTAAACAT NTCGAATGG TATGTATGTA TTT

SEQ ID NO:420: (Length of Sequence = 406 Nucleotides)

TTTAAATATT AAGTTAAGTA TATAACTTGC CCTATGCCAT ATTGCTTTAA TCAGGGGACT GAGCATCACA TTTAGATTTG  
 ATGAGTTTGG GAAAGTTCT CAAACATCCA GACCCATGGA CCTTAAGAAT TACTGCAGAA ATCTCCTTCA ATATAGTCAT  
 AGGGAGCATT AATGCTTTTG TGGTACTAAA CATATTTTIG AGCTTAGATA CAAATCCTTC TTGTCTGAA CTGATAGGGT  
 AGGAATTGTT TAGGTGCTTC AAATCCAGAT CTTTCAGGGG TTGCCACCTA AACTCATCTT TATGAGTAACT TCTAGATAAT  
 AATACACTTT GGTATCTTCC AAAGTGCTTA TCTAGGCATG GAAAAGTTCA GTAATTATCA TGAGGNCCTG TTTTLAGGTT  
 AGGTCC

SEQ ID NO:421: (Length of Sequence = 281 Nucleotides)

ATCCAGATTG CTGACTTGTA CACAATGGAC CATATGINCT GTCCAAAATA CACCTACATT AACTGTGTG GAACANGAAC  
 CTGGGCTTTG CAAAAAGAA TTATGATTG AAATGTAACC CCCCCAAAA AAAATGAAG CTTAGAATTG AAGGTAGCCT  
 TTTACCCAGA TTGTACCA GNTGTAAAA TTCTAATATG GGTCATTAACT TGTTCACAAA TAATTCATAT TTGNCCTAT  
 GGTAAAGGG CTCCAGATTG AAAAGGTGCT CTGAACCTCT G

SEQ ID NO:422: (Length of Sequence = 220 Nucleotides)

TTGTATTTT TAATAGAGAC GGGTTTTGC CATGTTGGCC AGGCTGGTTT TGAACCTCTG ACTTCAGGTG ATCTGCCTGC  
 CTCGGTCTCC CAAAGTGCTG GGATTACAGG CTTTAGCACT GTNACTGTCT GCCTGGCTGG CTGGCTGGCT GGCTTCTTT  
 CTTCTNTTT TCTNCTCTC TCTCTCTCTC TCTCCTTTC TTTCTCTCTT CCTTCTCTCC

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SEQ ID NO:423: (Length of Sequence = 391 Nucleotides)

CTGTCTCTTA TCTGGGCAAG CTTTAGACAT ACTAGCTTGG TTGGAACTG ATATTAAAAG CCTAAAACAT GTAACCTTNC  
 TTATCAGGTT ACTATCATGG GGAACATAAG ATTCTGGT TTTTGTATGT NCCATACTA TACTTTAGTA AGCCCTGATA  
 TACGGTGTTA ATTTTCCTNC AGTGAAGGAA ACATGAAGAT ATATTTATGT GCACACATAC ATATATATGT ATATATAAGC  
 TATATTCAA CATGCACTCA GAGGAAGTTA GGGAGAGAAG TTTCTAGCTA AACATGATCT TGTGAAATTC TTCCATATGT  
 GGAAAAGTCG TCAGTTCATC TGACATAGAG CAATACCATA CATATATACA CACAGGGTGC TATGGTATAC A

SEQ ID NO:424: (Length of Sequence = 379 Nucleotides)

TGGGGAGCCT GAGGCATGAG AATCGCTTGA GCCCTGGGNG TGGAGGTTCG AGTGAGCTGA GACCCCGTCA CTGAACCTCCA  
 GCCTGGGTGA CAGAGCAAGA CTCTGTATCA AAAAAACAAA CAAACANACA AACAAAAAG CCTATTATAA AACAAATAGGA  
 AATGCTGAAG TCTAGTGCAC CAAGACATAC TGAATTTCAA ACTAAATAAA TTAATAATTAT CATGTACATT CCACTACATG  
 TCAAAACAGG AAAANCCATA GTATTATAGT TGATATGAAA TGANGATTAC ATACANCAGT AATACAGAGN AAACATGAAG  
 CTGCTTATAT TTATTGGGN ATAAGGNCAN CAGGGGCCAA TGATTTTCAC TGCAGATGT

SEQ ID NO:425: (Length of Sequence = 448 Nucleotides)

TCCACAGGGC GGCTGGGGT CTGGAGATGG GCGCTGGGCC CACGGGACGC AGATGGGGCC ACGCTCTGCC CGTGGCTGGC  
 CCAGTTCCT GGTCTGCAGT GCTGCTCTCT CCCAGCACCC CCGTGGGGCAC AGAGGGCAGG GTCACAGCTG GGAAGAGGTG  
 GGGGGTAGAA ACCAAGGCTG GCAGAAGINT AGCCGGGCTC CCTGATAAAT GCTGGAGGAC CCCAGGGCAC CTGCACTTAC  
 TGTACCTCT CTGAGAGCAT TTGTATGATC TCATGTCTCA GCTCTNNAG GCTGGAGGTC CCAGAAAACC AAGGTATGGG  
 TAAGATTGAG TCTCTGGGTG AGTACCCAGT TNCCTGGCTC TAGATGGGCG CTTTTCCCT GTGTGTCTC AAATGATTGG  
 ATGAGGCCAG GGTGCTCTCT TGGAGTCTT TCTGTAAGG CAACTGAT

SEQ ID NO:426: (Length of Sequence = 417 Nucleotides)

GCCTGGNTCA TCGCTGTCTT TTCTCTCTTG TCAGAGTCAG TGACACTGAC ATTAAGGTCA TCGAATATCA ACCAGTCTCT  
 GAGGACCTTG GTGTGTTTCC TCCTCTCTTA GTCTCCAGAC CCCAGCCTGT TCATTCTGA GCTTCTCTG GCACCCCTTC  
 CTTGGGGCCA AGCCAAGTAA GAAATCAGCA GGCCCAAGGT GGTGCTTGGG AGGCCGGGGC AGTGCCAGGG GCAGTCTCA  
 TACCATCTCT CCACTGGCTT CCCTCTCTGC TGCTCTTAGC CGCCACACAT ATCTCAGCTG TCGAATCCGA TTAGGNTTTC  
 TGNCCAGTGA GCCAGACAAG GAGGCCACTN GGCAGGGGAG AGAGAGACAA GGACGCCAAG CAGGGATTGG CAGAAGGAAG  
 GTGGAGACAT GGCTCAA

SEQ ID NO:427: (Length of Sequence = 317 Nucleotides)

AACCTGTCT CTACTAAAAA TACAAAAAT TAGCTGGGCG TGGTGGTGGG CGCTGTAGT CCCAGCTACT CGGGAGGCTG  
 AGGCAGGAGA ATGGTGTGAA CCCAGGAGGC GGANTTGAG TGAGCCGAGA TAGTGCTCT GCACTCCAGC CTGGGTGACA  
 GAGCGAGACT CGTCTCAA AAAAAGGGCT GATAATGATA AACAGTGAGC ACTCCGGTCC TTTTCTTAC GTTTCTCTT  
 TTTCTCTCT CTCCACCCCA CAAGTTTTC TTTTAAACCA AGGTGTCTCT GCTTGATGGA AATTCACATG CTAGTCT

SEQ ID NO:428: (Length of Sequence = 296 Nucleotides)

GTAATTACAG TATTNACG TAGAGACGGG TTTCTCCATG TTGGTCAGGC TGGTCTGAA CTCTGACCT CGGGTGATCC  
 GCCTGCCCTG GCGTCCCAA GTACTGGGAT TACAGGTATG AGCCACCGTG CCCAGCCGT TTTTTTTTTT TTTTTGTAT  
 AGCAATGGAA GAATGGCTC GTACACACGN TAGAGTGGAA AGTCCAGGC ACCAAGGNT CCCACCTAG AAGCAAGCTC  
 AGGCTTTCT CTTCATCTT CCAGGGAGAG CACTGAGAGA TGATGGGGG TTGGCA



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SEQ ID NO:429: (Length of Sequence = 422 Nucleotides)

GAGGGTTGGA GACAGGAGAC AGTGGGGTGG GAAATCCAAA TCTCAACTGC TTTTGTAAGT TCTCTGCTC CCGAGTGCCC  
CANAGCCCAT GCAGACCCCTC TGCTGTCTAT GATATCCTGT TCAGCCCTCA ACTTTCTCTA CCATCCCTGC AACTGGGGTT  
CACTGTGAGC CAAACCAATT TGCTTCTTGT TTTCTAAAAG CAGGCAGCCC TTCAGGACTG TMTCAATCAA GGCATTTCOC  
ACCTCTNTTC TCCACTCATA TCCCTTCCCA AACTGCCTTT CCTCATTTCT CCGTCTCCAG GGAGAGGGAC TNCAGGCTAC  
CACAGNCAA AATGGTGGTC TTCAGTCTTA CGTAAGNCAA NCTGTGTGAG TGTGTAAGGA CTNAGGGTTG CTCACAAGGG  
GACACACAGA NGTGGATGCC AG

SEQ ID NO:430: (Length of Sequence = 332 Nucleotides)

CGGATCAGC ACCCGGGACA GCGCCACCGC CCAGTGCAG GGGNTGGGGT CCGGGCGGGG CTNGCGCCTC GGCGTCTCCC  
GGNAGTNTCC CGTCCAGCCG TCGAGCAGGG TGCTTGANTN TMTCTGCAGA AAAGACTCTA GGACCCCGCC ACCATGTTC  
CGGAGCCCCC AACCCCGGG CCTCCATCGC CGANACGCC TCCCGACTCC AGTGCATCA GCCACGGCCC AGTGGCCCCC  
TGGGCCCTGG NCACCATCGT GCTGGTCTNA GGCTCTCTNA TCTTCAGCTG CTGTTTCTGT CTCTACCGA AGAGCTGTGC  
GAGGCGGACA GG

SEQ ID NO:431: (Length of Sequence = 413 Nucleotides)

TGTCATTATT TAAGATGGGG GACATCCAAG CACCTGGAAC AAAAAGGACA CTAAGAATGG GAGAAGAATA CACAAAGGGA  
GGTAGTACAG GGCCAATAAC AGATTTTGG AATTTTCAA ATTTCTCTT GAAGTAATT TACAGTCAGT AAATGGAAGT  
GGAAAAGAGG AATAGAAGAG CATTTCATTG ATTTTTTTT TCTCTGTAC TTACACATCT CATGACCTCA TGTTCOCAGA  
ACTTAACACT TAGTTGGGTT CTAGTAGATA TTTGGGGTTG AAAAGATGTT TGCTGTTTG CATTTTGTT TGTTTGTTG  
GCTAGCCTGT GAATCTAGCA TTGTACGTGA GAAAGTGCAT TTCAGATTGA AAGCAACTGG GTTTTGGAAG TGAACITCAA  
TAACATATCC CAG

SEQ ID NO:432: (Length of Sequence = 292 Nucleotides)

TTACCGTGT TAGCCAGGAC GGTCTGATC TCTGACCTT GTGATCTGCC CACCTCGGCC TCCCAAAGTG CTGGTATTAC  
AGGCGTGAGC ACCCGGCCCG GCCACCATTC ACTAATTTTC AAGAAATGTG GAAGTGTTCT ATATTINCTT CCCACTCCAT  
AGCTCCAACA TTGTGGCTA TTATGAATTT GGCTATTAAAG TGATGCCAAC AATATTTAAT GAAAAAAGA TATAGCAGTA  
TAGTTGAAGG AGGAAGCTGA AAGAAAACGG TCCATCNGTG AGGAAAAGGC CC

SEQ ID NO:433: (Length of Sequence = 335 Nucleotides)

TTTTTTTCTC AGCAGAGGAT TTTATTTGGT GTCACTGTG GCACAGGTTA GAGGAGCCGA AGTGCTGINT TTGTGGTGGG  
GGGGGGACCA CAAACCCCGG CCTGCCCCC TTGCTTACAT AGGCTTCCCG CCTAGAAGCG CANCATGAAC ATGCCGCTAC  
GGATCCGGTT GTAGTCTGGG AGCTGCTCAA TGGGGCCATA TCCAGCCACT GCTGGGGCAC TGGTCAATAGA TGTACTINGA  
GCAGATCTCA GTTACCACAC TGGCATCCAC CTCGCCAAT CCGGCTTTCC CATTAGCCA GGGGGGNATG CCGGNGGGCC  
ATAGGTCAGG AGGCT

SEQ ID NO:434: (Length of Sequence = 390 Nucleotides)

GTGCTGACT GCTGATTGGA GATGACGTGT ACCCATCCTC TAGACAGTCT GTGCTTTTCC TGTCTTTGGA GCTTCCAGTT  
CCACCCCAT CAGTTTTTTT CTGACCACTC CATCTGCCT TATTTCTCTC TCTTTCCTTT TGACTGGAAG AGTACTCATC  
TTTTCTAACA TCTTTTCATA AACTGTTTTG ATTTCACTTA TATTGATTTT NAACGTATAA TGTGCTGGTG TTCTATTTCC  
TCAGTTAGAT CAGAAGGCCC CTAAGACAG GGCTCCATTG GTGTAAACT GCCATCTTCA AGGTCTGGGA CTGTATTTCN

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CTTTTTTINAC CTNCACAACA AGGCACTCCT CTGCAACCA GTCGGAATTT CAGTGCCTGT GGGTCAAAGT

SEQ ID NO:435: (Length of Sequence = 427 Nucleotides)

TCACTAAACA GTAGATTTAT TTTATGTAGA TTGTTTTTC TATAAAAATA TATTTATGTG TTCACAGGAA AAAAGTTGAG  
TTGGTATGTG GGGGTGACTT TCAGATACAT AATTAGTTAA AGGTTTGCTT ATGAAGTTAG AAGGCATCTT AGCTTTTATC  
ATTTTCAAAT TTTTCTTCAT AAAAAAGAAC ACCCTGTGAC AAAGATAAGG TAACTGAGAT TATTATTAGC ACTTTAGAGT  
TGAGAGAGTT TGAAATAAAA AGGTTAAGCA ACCTGCCTAA TGTTTATGTA CAAAATCAGT GCTGGAGCCA GGAAGAGAAT  
TTGGATTTTC CCAACCCCTG GACAGTTCTC TAGGGACTCA TGCCCAACAA CCATTCTTGA GACTATATAC AATCAATTAC  
ATTAAAATGA TATTGACAGT AGACTAG

SEQ ID NO:436: (Length of Sequence = 249 Nucleotides)

TCAAATAACC AGGAGGGGGA CAGAAGATGA TGGCAAGGCA GACTGGGCAG TGTMTTNTAG ACACAGAACA AAGAATCAGA  
ATTTGAAAAA AGANGAAAAA CAAATCTNCG CAGCTGCAAC TTAAAGTAT CACCTTTATA GATGGCAGGG ATTTCCATTA  
TGCAATGGA ATCTAAGATT TCAATGTENA ATCTTAGAAT GCAGTTTAC CACTTGCAGT CTNGTATTGT TGGTGGCCAT  
GTGGTGAGT

SEQ ID NO:437: (Length of Sequence = 404 Nucleotides)

GTCAATCACC CTAATCCCTC TTTCACCTTC ACAGAACTTT CACACTCCAA TGTACTTGCT GTTGTAGAT GCTCCTATAA  
ACAGAAAGCT CTGGGAGACA GGTGTCTTGT TATCTTGTCT CTCGTGATA TCTCTGGGCC TATCACAAGT ACTCAAAGCA  
TAGAAGTTCA ATAAATATGT GTTCAATGTA AGAAATGATC AGTGATTCTC AAGCTGCAGT GGGGTCCAGGA TAACCTAGAC  
AGCCTGTTAG CACGGNTCAC TGNINCCAC CCCACAGTT TCAGGTCTGG TCTGGGNTGG GGCCAATAA TCTGTATTCC  
TAAAAGTCCC CAAGCAATGC TGGTGCTGTT CGTCCAGGGA CCATGCTTAA AGAACCACCC GGAATAGGAC TGGTGGACAA  
AAGG

SEQ ID NO:438: (Length of Sequence = 337 Nucleotides)

CTGCAACTTA TACCTTCCAT TTACTAAAGT CCAGTATGT GTCAAAGTAG TTTTCAITCC TCACAGCCAT GTTATGAGCT  
AAATATCACT AACTTTCCCT TTCAAAGGTG AAATAAAGT AGACTCTGA AGATTAACTT GCCCAAGGTC ACCTAGCTCG  
TTAGGAGGCA CAGGTGGGAC TTGAACCCAG TTCTTTCTGA ATTCAAACC TCCAAAATGT CTGTACATC AAGCTGCTTC  
AATGAGATGC TAGAAAATCA GGACAGTGAG CAAGCTGGAG ATAANGAAG ATATGGAGGA ACACGGGAAG TGTGATCCTC  
ACACACATAC CCTGCAG

SEQ ID NO:439: (Length of Sequence = 380 Nucleotides)

CATCGTGTAT GAAGGTAGCC ATTTGTACA TGTACCTTG TTA AAAACAA AAGAGCAGCA ACATGTTTAG AGTGGTGTCT  
ATAGATAGAA CACTGCTGTT ATGTTTAAGG AAAATTGGGG CGGGGCAGA AAAGATCAAT ATGACTAGTT AGAAGACTAT  
TAAGGAGAAC TTTGTACATG AATTATGGAT GTAAGAATTA GAAAAAATA GATGATCATG TTCAGAATTT TAGCTTTTTT  
ACAATTGTAG TGGAAAAGAA AACTCTAGA GTAATGAATC AATGGTATCC TACAAAAGA GAGGTGCCAA AAATACCATG  
AAATATTATA TTA AAAAATT CACACGNATA GGTAGTTATA ATATGTAAG GCCAGACTTC

SEQ ID NO:440: (Length of Sequence = 335 Nucleotides)

CCCTGAGCTT TTATTGACCA GTGGACTGTG ACTTTTGATG TAATTTTATT TTTGAGAGAG GGTCTTGCTC TGTACCCAG  
GCTGGAGTGC AATGGGGTGA TCTTGGCTCA CTGCAACCTC CGCTCACGG GCTCCAGTGA TTCTCTGCC TCAGCCTCCC  
GAGTAGCTGG GACTACAGGT GCACACCACC TTGGCTGGCT AGTTTATGTA ATTTTTTGTG TGTCTGTGGA GACAGGGTTT

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CACCATGTTG CCCAGGCTG3 TCTCAAACCTC CTGAACTCAG GTGATCTACC CGCCTTCCAA AGTACTGGGA TTACAGGCAT  
GAGCCACCAT AATAA

SEQ ID NO:441: (Length of Sequence = 356 Nucleotides)

ACTAATTGTG TTTCTGCTTC AACCTGCATT TOCAGAGGTG CCTGTTGGTC TGTAATTGGT TCTGGCATGT TTATAGGTAT  
TACAAAACCA AGTCTTATTT TGCAATTCAC AGGATTTAAG ATGAATAAAG TGATGTGGTT GTGCTAGGTT AGAGTTGTAC  
AAATTATACT CCCATCGCGG ATGGTGGCGT CCCAGGCCA CAACCTGACC TCTGCCCTCA CGCCCATCGT CACGCGCTCC  
CGGTGCTTCA ACGAGGAGCC CCTGACGCTG GCGGGCTTTC AGCAGGNC CCGCCAACCT CAGTGACGTG GTGCAGCTCA  
TCTTCTGGG TGGGACTCCC AATCCCTTT CCGTTT

SEQ ID NO:442: (Length of Sequence = 371 Nucleotides)

GATGATTTTG TATCTTTTTC TATTTATTGA GATAATCAAA TGATTTTGT CCTGCTTCT ATTGATGTGA TGTMTATTGA  
TCATGTTTAT TGATTTGCAT ATGGTGAGCC ATCCTTGAT TCCTGGTATA AATGCCACCT GATCATGGTA TATNATCTTT  
TTNATGTGCT ATTGGAATTG GTTTGCCAGT ATTTTGTGTA GAATTTTTC ATCTGTGCT ATTACGGATA TTGGCCTGTA  
GTTTTTTTG CTGTGTTCTT CTTTGGTTT GATATCAGGA TAATGCTAGC TTTGTAGAAT GAGTNAAGGA GGAGTTATCT  
ACTCTTCAAT TTTTGGGAAC AGTTGCAGAA CTGTTGTGTG TTTTAGAACA G

SEQ ID NO:443: (Length of Sequence = 329 Nucleotides)

TGAACTGCCT TTATTTTTTN ATTTCCCATC CAGAAACCCC AGTGTGATGG TGGAAAGCAGC ATGAAAACAA CATCTCCCCA  
GGCCTGCGAG TAGAGGCGAA GGAACAGAG CTGCCCATGT GCCTGINTCT AAGAGCGCCA CCTCAGGTT GATGTACCTT  
GTGGGAGACC GGTCCACCT ACAGACACCA GGTGATGGTC CACCAGGCCC CAAGCTCCAG CTGTCTGAGT CCCCAGACA  
CAGGCTCATT AAATAGCTTC GTACAAAAC CCAAGGTTGT CCTCCAGCT GGTAAAAAAT TGGGCAATTT CTACTTGGAG  
GTCTGCTGT

SEQ ID NO:444: (Length of Sequence = 358 Nucleotides)

TTTTTTTTTA AGTACATAGG TCTTTATTGA AACACTGATT TTTTTTTTAA ATATATACAC ACAAACCTTA GTTCAGCAAG  
GCTTCATGAT ATACACCAAT TOCAAAATAA AACAATCAAA TGGTCCAGGT GTAGAATGCC AGATTCCITT TATCATCTGC  
GAGGAAAAGA GAAGCAGGAT GAGGAAGAGT GAGGGAAGGC GGGGACAGGC TCTGCCAGA NGAGCTGCCG CCTCCTGGCA  
CAGCAAACGC TCCAGGCTG GGCCTGTTC ATATCTGGAG TCGGAGGGAG ACTCCCATCG GCGCTTTGG GACTGAAAGG  
CCCAAGGCTG TCACCAGGTC CCGAAGAGA GGGAGGCA

SEQ ID NO:445: (Length of Sequence = 302 Nucleotides)

TCAGAACGGT GAGAAATAAA TTGCTGTGT TTATAAGTA ACCTGTTTAT GTTATTTTTT TATAGAAGCC TGATCAGAAT  
AAGACAATAT TGGATAGAAT ATTCAGGAAT GTCTTGCTC CAATGTGGC CCCCCTGTAC TGAGCTCTAA TCTACACTCA  
CCTAAAAAAT TATAAAATCA TAATAAACT GAAAAAGTCA AACTCTCAAT TGATCCCGAG CACAAATATC ACAGTGTGTT  
ATTTAAAAAA TTATGTCAAG GCGCTAAAAA GCTAAATCC NCAGTCTGTC TAATATTTCT CT

SEQ ID NO:446: (Length of Sequence = 367 Nucleotides)

ATATATATAT ATACACACAC ACACATACAT ACATACATAC ATATACATAA CCTGTTTGG GTAAGGCCA TTGACAGAAG  
CCGATATCT GGGTGAAGT TAGAAGATGG GCAAGGAATT CTTATCTCAG AGTTTCAACA CTGCGACAAT GTGGAGAGAA  
GTCTCCTGGG AAAATGCAGA TGCCCAATAA CTTCCAAAAG AATCAGGGAA GTTGGAGTAT TTTTGAGATT TACAGTGTCT

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TTACTTCAGT AAAACAAGCC ACAGCAACAT TATGCTCTGC AGAGTCTTCT GTTCACCTTT GGGATGGAAA AGAGCTGCTT  
CTCCTAGGGN GGCAACTAAG GCCCAGGACC AAAACTCCCA TCTCCIA

SEQ ID NO:447: (Length of Sequence = 295 Nucleotides)

CTGCAAACCC TTCAGCATTT AGCTAAAGTT ATTTACAAT TCAATGCTTG TCTTGCACTG TCCTGGTCAT TTAAAACTG  
GTATCTCTTC AATAGCAAAT AGTATCAATA CAGACCACTA AATTGGAGG GAAAGTGGTT TCTATTGCAG ATGGATGTAA  
TTAAATTTGG TGTAATCAC AGGGTACAGA ATTCTTATCT GGTAAGAATT CTGACTTTTT TTTTAAAGAA GAAAAAATAT  
ATCCAGATCT GTATCCACAT GCTATTTAA TGCTCAGGNC AAAAGAAGC CACTA

SEQ ID NO:448: (Length of Sequence = 233 Nucleotides)

CAGAATCAGC CCAAATGCCC ATCAATCAAC TGTGCATAAA GAACTGTGA TATATATATA TCATAGAAGT TCAAACAGAA  
AAAATACAAA AAACCTAGCA GAGGATTGTA TCCTTTGCCG TTTATTTTGA TGACCATGCC ATCTTCTAAT CCCAGAAAA  
AAACTGGAAA ACAGAATAAA TATAATTINC TGATTAINCT TATGTAACAT AAATGGAATA TATATATATA TAT

SEQ ID NO:449: (Length of Sequence = 341 Nucleotides)

ACTTCCTTCC TCAGGCTCCT GTACCAATCT TCAATTCACT TGGGATGTCC TAGTCTAAAA CATTATTTC ATTGAAAGG  
AAAAATATCA ATTTCTATCT AAATTGGAGT AAGATTCAAT TCAGATGTGT TTATTTACAA AACATAAGTT TGTTATTAT  
CTGTGTTTAA TTTGATCCNG GAACATTACA TGTAAGAAGC ATTCCATGTA AAGAACCAGG CAACTGGCC AGGCATGGTG  
GCTCACACCT GNTAACCCCA GCCTTTTGG GAGGGCCAAG GCAGGTGAAT TGGTTGAGAC CAGNGGTC AAGACCCAGC  
CTGGGGCAAA TATTGGCGAA A

SEQ ID NO:450: (Length of Sequence = 313 Nucleotides)

TTTTTTTTT GACACAGTTT CCAGTCTGG AAACCTTTAG CTAATCTTTA GCATTCCCTC AATGGTGGGA ATGSCAACA  
GATCACCATA GTATTAATAC TCTGTGTAAT TTTATCACTA GAAATGGTTAA TTCCATATC ATAGTAGAGC TGTGTCAGAT  
ATTTTGAAAT CCCATTATAC TCACTGCCAC TTCAAGATTA CTGTAGTTGT TAGAACAGCT GCTAGATCTT ATTACTTAAT  
AAATTAATAA AGTGGAATA TAACIATATA ACCATTTTNA AAATGTTTTT TGGATAACTT TCAATATAAT TGG

SEQ ID NO:451: (Length of Sequence = 351 Nucleotides)

GGGCGGCTC CTGGGCACCC ACCAGCTCA TTCGCGAGC GGCTCCCCC CTGGGGTTGA GTGTCTGGG CTTGAGTCTG  
CAGCCTCAGC CATCTGTTCC CCAACTTGAT CTCCACTGC TAGTTACAAA CAAATCGCCC GGCTGTGCA AACCTCTGG  
GCTCAGTCCC CAGTCCCGCG GGGCATCATT TCATTCTTTC CTAGCCTGTA AGGTTCTCC TGAAAAATCT ATTGTAGTC  
TAATATGAAT TTCTAATAT GTGACTTAAG GCTTTCTCT TGCTGCTTT AAAATTTTCT CTTTGTCTT TGACTTTGAC  
AATTGGCTA TAATGTATGT TGGAGAGGAC C

SEQ ID NO:452: (Length of Sequence = 363 Nucleotides)

GACAAGGGAG AATCTTGCT TTACCTATGG ACTGGCTTAA GCCGTGTGGC ATCCGAGGAA TGTTCAAAT GTGTCTGTGT  
TTCTTTTAC ATTCCTTATT GTACCTCAIT GTTCAATTCA CTTTGTAAA TTCCACCTAA CATTTAATTA TTTTAAATTT  
CTCCGTCAAG AAGTTATTTT AAGACACTGG AATAAGTGCA GCTTGTGTTA TAACAGCATA GGATTATAAA CAACCTAAG  
AGTCAGCAGT GACATTGATG GCACATGCAT ACAATGGAAT ATTCTGTAGC TGTTAAATA ATAANGAAGA TCCTGCTCTG  
TGTATTTGAT ATGGGAAGGC CCCCCAAGGT CTACAGTTAA GGG

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SEQ ID NO:453: (Length of Sequence = 382 Nucleotides)

ATGAGGGGAAA AGATGGTGCC ATTGAAGATA TTATCACAGT GCTGAAGACT GINCCCTTTA CTGCTCGCAC CGCCAAGCGT  
 GGCTCTCGGT TTTCCTGCGA ACCTGTTCTC ACTGAGGAAT ACCATTACTA AACTATTACT CTTTCTCACC TGATGCTCTT  
 AAAAGATCTT AGAAACCAAC CATACAGACG AGCOGATGCG GTGAGGAGAA GCGTCAGGCG GCGCTTTGAT GATCAGAACT  
 TCGGTTCTGT TAATGGTGCC GAAATAACAA TGTGAACCTG AGACTGGCCT GCAATGAATA CAGGGGTGTG CGTGTTCAGG  
 AGGTTTTCTG TTGCGGTCAC CCATGATGGC GGGCCINCC ATTTGGGCCA ACTTTTCTG GG

SEQ ID NO:454: (Length of Sequence = 391 Nucleotides)

CGTCTGCCGTG GTGTGACTGG CTGGAGAAAT AAGTLAGGA GAATCTAGAT ATGGTTGAAT TGTGATGCT GCTCAAAATT  
 TGTTCCTTG TGACAACAAC AACACAACA ACAACAACA CAACAACAAC AACAGGTGAA ATTATCTTGA AATACAAAAG  
 AACGTCIGTT GGTCCGAGA GTGAAAAAAG GAATCCTTAA CAGCTTCAGC TTGCACCAAG AGGATTTTTT TTTATCAGCT  
 TCCCTTCATA AGAGAGGATG GAGGATTTTG GAAGAGACAG AACCTGGGAG AAATTCAGT GAGCTGCCAC TTACTGGTTT  
 AACCTACTTC CACAGAAGGA ACCIATTATT GTTNIATTG GGAATTCAGT AAATGTGGGC CATGTAAAGG G

SEQ ID NO:455: (Length of Sequence = 282 Nucleotides)

TTGAGTACTC ATTGAGGAC TGCAGTCATA GATTTAAAGT GTAATCAGTC AACTCAGTGG AATTACTTTC TCCATTAATC  
 TTAATTGCT TCAGGACTGT TTCAGCCTAA GCCAGTAGCT GGGTTTAAAC AAATTGAAG ATTTTNCITAG GAGAGTTTGG  
 CACGAGGAGA GAGGGGCAAA GCGGTGTAAG GCAGTGTITA TAACAGTGGC CCATGGAATT GATCATGGGT AAAGAGAAAA  
 CAAGGACATG CGAGGAGGTG ATAAATAGAN CAAAACAAAG CA

SEQ ID NO:456: (Length of Sequence = 340 Nucleotides)

CTAACTTATG TTGAGATCT TCAATGAAAT TAGTTACTAA TATTINGCTT TATCTTCTC AAAAGATTTA ACATGATAAT  
 TCTGACCTAA TCCAAAAAA AAAAATTCAT GGGCCACTGT TTTGCATGTA ATATGTAAGA NCTCACCTTG ATGTTAAACT  
 CCAACCCCTG GCTGAAACAG GTTAATGATC ATTTGTINGT ATTTATTTCT ATAAATAGTT TGAAGTTGGC CAGGCCTGTT  
 GCGCTCTCGC TGTGTCTCC AGGGTTGGAG TTGGTGGCG CAAATCTCGG CTTCAGTGCA AGCTTCCGCC TCCC CGGGGT  
 TCACACCATT CTCTCTGCCT

SEQ ID NO:457: (Length of Sequence = 338 Nucleotides)

ATGAAAAAGT CTCCAGAGAT TATCAGTGGG CGGATGACAT TTGCCCTCTG TTGCTATTCT TIGACATTCA TGAGATTGTC  
 CTACAAGGTA CAGCCTCGGA ACTGGCTTCT GTTTCATGTC CACGCAACAA ATGAAGTAGC CCAGCTCATC CAGGGAGGGC  
 GGCTTATCAA ACACGAGATG ACTAAAACGG CATCTGCATA ACAATGGAAA AGGAAGAACA AGGTCTTGAA GGGACAGCAT  
 TGCCAGCTGC TGCTGAGTCA CAGATTTTAT TATAAATAGC CTCCCTAAGG AAAATACACT GAATGCTATT TTTTACTNAA  
 CCATTTCTATT TTTATAGG

SEQ ID NO:458: (Length of Sequence = 370 Nucleotides)

GTTCCTTTTC GGAGCTGAAC CAAAGAATGT GCACCCCTCT TCTCTAGTGC TGTGGTGTCT GCTTATTTTT GTATTTGTGC  
 TTTCATCCA TCTCTGTGA TCACAAGGCA TTCTTAAGGT TTTCTAGCAC GACTTGCGGA CATCCAGACT CGTGGGGGGC  
 CCACCCATGG CTCGGTAAGC CAGCAGCCCA GGGCACTGGC ACTACCATGA GGCACTGCAT TAATGCTGTC ATACAGCTGT  
 TACCCGACGG CGCACACAAG CAGCAGGTCA ACTGCCAAGG GGGCCCCCAT CAGGTCACC AGGCGTGCCC CACGTTGCAA  
 AGGAGGAAAA ACAAAATTC TGGTTTCCGT GTGGGACAGT AAAGCAGATG

SEQ ID NO:459: (Length of Sequence = 339 Nucleotides)

ATTTTCTAG AACTGAAATC ATCTACGGTT CTCAGAGCTA AACTTCCAAA GCTACAGTCA GCAATTTTTC ATCAGAGCC  
AAGGGAGAGG GGCCAGGGTA AAAGAGACGA GACTGTAGAG AGGCATAGAG AGACCACTAG GAAGAGGGTG GGAGAGGGCA  
CTTATTTCTC TCTGTCTCT CAGTGGGTTA CAAATCAGAT CTGGTGACAA CACTGAGGGG GCCAGGTCAG GGTATGTNGA  
TGAGAAATGA CACTGGAAGG AACATCAAAG CCGCAGCTAC AAAAAGAAAG TCATCAAGCC CCAAAATAGAA GGGGGAGCCT  
CCCAGTGCAC CTCAGAAAT

SEQ ID NO:460: (Length of Sequence = 380 Nucleotides)

GAGCTTTTGC ACTGCAAAAG GAACAGTCAG CAGAATAAAC AGACAGTTAG AAGTACTTCC CTATGTAGAG ACACACTCAA  
GTGAAAGGGA ACCAGGCTCT ACCACTTGAA ATAAGGAGTA TCAAGGAACT TGTGGACAGC TTTTAAAACT ACCACTGGCA  
ACTAGGCTCT GAGGTGGATA AATGAAGAAA TTGGGGGAAT CTCACACTGG AGATGTTTGA TGTAGGTAAA TGANCTGAGA  
TTCATTAGGT GTGAAATAAT GAAGTGTATA TATAGTTCTG CATATACATG CCTGGGGAAG GTATAATATT CAGAGGCATA  
CTATCACTCA ATTTGTATCT GCTGTGGGCC TCAGACAGTA CAGGGGCACT GTTTCATTG

SEQ ID NO:461: (Length of Sequence = 317 Nucleotides)

GTCATTAGA AGCCTTTATT GGGTTATATT CAATTGACC TCCCACCAA TTAAGCGGA AAAACAAAA AAATAAGAAA  
TCCAGTAAA AGAGCCCTC AAGATTTCAT AAACACAAA CTAAAGCTGC TAGTTAATAA GGAAATGGCA GAATTTTCAG  
AGCTGTATAA TACAAAATT CCTGTAAATT AAGCAGATGT TTTCTCACT GATGACAAAT CTTCCAACAC AATGTGAAGT  
TATGCTACTT GGGATATTG TAGGCAAAAC CATTTTTTTT TTGTACAAA ACAAAAGCAA GGGACNTGG AAAAAA

SEQ ID NO:462: (Length of Sequence = 261 Nucleotides)

AAAAAGGCCA TAAATCCPIN CCTCGTGA GCTTACCTTC TAATAAGGAG AGACAGAGGG TNAGAAACAA ACAACAAAA  
ATATGTNAGT TAACACAGAG TGTGGAGGG TGTAGGTGC TATGGGAGAA ACGTGGAGCA TGTCAAGGNG AGAGCAGGCA  
AGAGGGCATT CTGGAAGGC CTAGGAGAT GGTGACATTT TACCTTCATA TCCACCAACC CCCAGCACAA AGCATTTTCC  
AGAGGAGENC AGAGGAGGGC A

SEQ ID NO:463: (Length of Sequence = 387 Nucleotides)

ATACAAGTAC ATCCAGGAGC TATGGAGAAA GAAGCAGTCT GATGTCATGC GCTTCTTCT GAGGGTCCGC TGCTGGCAGT  
ACCGCCAGCT CTCTGCTCTC CACAGGGCTC CCCGCCCCAC CCGGCTGAT AAAGCGCGCC GACTGGGCTA CAAGGCCAAG  
CAAGGTTACG TTATATATAG GATTCGTGTT CGCCGTGGTG GCCGAAAACG CCCAGTTCCT AAGGGTGCAA CTTACGGCAA  
GCCTGTCCAT CATGGTGTTA ACCAGCTAAA GTTGTCTCGA AGCCTTCAGT CCGTTGCAGA GGAGCGAGCT GGACGNCCT  
GTGGGGCTCT TGAGAGTCTT GAATTCCTAC TNGGGTTTG TGAAGATTTC ACATACAAAT TTTTGA

SEQ ID NO:464: (Length of Sequence = 397 Nucleotides)

GTTAGCCGTG GGTGTGGGC GTCGCTGAA CGTACCAGGT ATTGTGGCTC CATTGGCTGA GGATGCTTCT CCAGCGAAGG  
AGGCAGGGAG CCGGGGAAGT GGGGTGGGT CGCGACACG ACAGCAGCTG CCAGACCAGC CATGCTGCGC TCAGCTCCCT  
CAGGCTGTCA CTCTTAATCA TCATGTACT ATCTCTGGG CGTGTCTAGT ACCATCAACG ACGTGTCCCC CAAGCTGCAG  
AGGACGCAA TCAGCTCTC CAAGAGGCTC TGTGGCCCT CTCCACATGG GCTTINAGGT CAAGGGTTGG GGGCAGTTTC  
GGACGNCCT TCCTGNCCT TINGAAGAAG ATCTCCAAN GTNCCCGCT TCAGCTTCT CCGGGCTCT TTTGGCA

SEQ ID NO:465: (Length of Sequence = 320 Nucleotides)

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GACGACATTT ATTCCITTTT CAAATGTTAC AGTAAACCA GGTGGAAGAG AATGGTTTTA GCAGTTAGAA AAAAAAAAAA  
 AGTACAAATC TGGGGTTTGG CCATTAAAAG TTATTTACAA CAGTGGGAGA AAAAAAGNCA AGAAGTTGTT TCACATTACA  
 GACCTCCCCC CACCCCAAAG CCTAATACTT GCTTACCAAG TCAAAAAAGA GACACAGTTG ATTCACAGGC TGGAGGTTTG  
 AACTTGAGTA AGACATTTAT AAAAACCTAG ACGGGGCACT GTCTNCCCA GCCCAGGTGC CACTTAGGCC AGCACAAGGG

SEQ ID NO:466: (Length of Sequence = 352 Nucleotides)

CATIGTATTT CCTTCTTCA AATTAAATTAC CTACCAAAAA ATGGAAAAGA ATTTTACATG CACTTTAAAA TAGTAAATG  
 GAAAGTGAAT TTTTAAAATA TATGCAATTAA AAGTTTACTT TAATTTCCAG TGGGACTTCC TTTATGAAAT TTTCATAAC  
 CTCTTCTCGG AGTATTACAA GATCTCCAAC ATCTCATAAA CTAATTGTGA TATTAGTGGG ACCATAAGCA AATGTATATT  
 TTTAGTGGAA ATAGATTATG AATGAAAGCC AAGCACCTTA CTTTAAAGCC AAAATATGAG ATTTTCCATT AAAAACCATT  
 GGTCCATAAT AGGGAGGGGG GTTTTTTAAT TT

SEQ ID NO:467: (Length of Sequence = 352 Nucleotides)

TGAAAGGCAA AAAATAAATA AATAAAAATA AATACCATTT GCAGAGACAG AGAAACCATC AGAAGAAGAC AAGCAAGGTT  
 GTTTGAATTA CTACGCCTAG AATTTAGAAT AACTACTATG ATTAAAACGA AAAAGGCTTT AATGGATAAA ATAGATAGCT  
 CCTAATAACA GATAGTAATA ACATATGGGT AATGTGAGCA GAGAGATGGA AATCTTAGAN CAACAACAGC AACAAACGCA  
 AAGCGTTAGG GATCAAAAAC ACTGTAACAA AAATTAAGAN TCCCTTTTAT GGGCTTNTTA ATAGNCTNGG ATACAGGTAA  
 GTAAAGAATC CCTGTGCTTT AAGGAGCCAT CA

SEQ ID NO:468: (Length of Sequence = 336 Nucleotides)

TGACATCTGC ATCTTACATT ATTAAATGCA AAGGAATATC AAAGACTCCT CTGCTAGAAC CATTTTTATT CATAAAGTCA  
 CATTATCATT GTAGAAGTCT GTAAAAATG CTACCTGAAA TGAATTATGT CCGTCTTCCC ATCTGGCTTA CAAAATCTTT  
 GAGGAAGCAT CTGCCTCGTA GCCTTTATC TTTCTATTTT CTAATACAGG GACAATGTAT ATGGAAAGAT AAATGTGTGT  
 AGGTGTATAA ATTCTCAATA AATATTGCT GAATTAGATT GTACAGTTGT TATCTTTTAA GNTTAACTCA TCCTGAGGTA  
 CATTTTATTA TTGGGC

SEQ ID NO:469: (Length of Sequence = 156 Nucleotides)

GACCGATGTA GAATTCTGTC TGGAGACGTT CTCCCTTCA ATTCAATGGG AAGGNTCTTT TCTGGCATGA NCTCTCCGAT  
 GTCTAATGAG CTCTGAGCAC CATCCATAAG CTTTNCACA TTCTTANAT ATAAAGGTT TCTCTCCACT GTGAAT

SEQ ID NO:470: (Length of Sequence = 350 Nucleotides)

TTCTCATGTC TGAATTTAC ACGCACAAGT CTGAAATGTG AAGGTTTCTT AATGTTGGTT TTATGGTTTG TGTAAGATTT  
 TTGGGAAATG AAGGGCTCTT CATTAGGATA AAATGGTCTT AACTTCCCAG AGAAGAATTT CCTGACAACG TGGCTGAAGT  
 TAGATACAAA TGTTAATATA GAAGANIGCT TTTATTTGAA TTTCTAGCAA ATGGTTTTCA ACTACTTTAA ATATGACCNA  
 CTTGAAAGTA TTATTCCTNT TTTAAACTA CTTTINATGT ATAGATCTAA GGTCTGCTTG AAGCTAGTAG GTTAAAGTGT  
 TTGAGAAATA AAGGCAAGAT TTTTNCNTA

SEQ ID NO:471: (Length of Sequence = 270 Nucleotides)

GGAGCAGGGC TGGGAGTCAG TGGGAGATTG GGAGTCCAAG TCTGGACATG TTACATATGC TATGTCTATT ACAGATCTGA  
 GTATAAATGT GAAGTGGAGT TTTACCACGT GATTCTGAAG TTCAGAGAAG AGGTACAGGT TAGAGATAAA GATTINGGAG  
 TCACAAATAT AAAGATGTAT GACTTINATGA GATTACCAAG GAAGTGGAGA TTAATAGCAA AAAGAAAAGT TTCAAGCTTC  
 AAGCCCCGAA GCATTCTAAT GTTTACAGCT

SEQ ID NO:473: (Length of Sequence = 345 Nucleotides)

TTTATTGTAG TTCAAATACA TAAACTGAAC ATTCAAACAT CTTAAAATTA AACITTAGCA ACAAAGTTTA ACATTCAAAC  
AGGAGTATAG TTACAAGAA ACACCCAGAA AGGTAATTG TTGTCTAATC CAGAATATTG ATAAAGATCA CTTAATGGTG  
AATAAAATAT GTTTAACCAG TGGTCTATT CTGGCCAACA TGTTAGTTAT GACCGTGGTT CCATACCTGA GAAGAAATTA  
CTACATAAT CTTCTCTTAG GCTAAACAAC ANGACTGGT CTATAATTCA GAGGGGNTAA TCAAAGCAG TAAGGGTACC  
AAAATAAAC TAATCTGATC TTTAG

SEQ ID NO:474: (Length of Sequence = 433 Nucleotides)

CAGAATTAGA GCTGTACCCC AAGGGGAAT TCTGTCTAG GAGACAGTGA GTNCTAAGTA CACTCTGGAC AAGCACCAGA  
CACAGAAGCT GCCTCAGTTT GTGCTCCCC TGCAAGCAG AGCCTGAGAC AAGGATTGG GTACAAGGAG TTTCACTCAA  
TATTATATTT CCAAGATGCA CCCATGCTTT ATATGGCTAT AGTGCATCCA TTTACTGCT TTATACTTTC CATTAGGTGA  
CTATATTAGT ATATATTTAT AATTCCTAGG TCTTTTGTG CTCTTATTTG TTAATAATTA TAAACTCCAA GCCCATTGTG  
GTAGATTGCT ATTTCTCAGA GATATTTTCT GCTCCTCCT GGGGGACAAT AATACTNTTC TCCCATCAAT GGCAGATGTA  
GGGCTTGTA CATTTCTGG TCAATGGAAT GAG

SEQ ID NO:475: (Length of Sequence = 427 Nucleotides)

GATATGGTTT GTGTGCCCC CCAAATCTCA TCTAGAATG TAGTTTCCAT AATCCCCAG TCGTGGANGG GACCTGGTGG  
GAGGTAATCG AACCATGGGG GTGGTTACCT CCATGCTGTC CTTATGATGG TGAGTTCTCA TGAGATCTGA TGGTTTTATA  
AGGGACTTTT CCCCCCTTTG CTCTGCATTT TTCCATGCTG CCACCACGTG AAGAAGGATG TGTTCCTTC TCCTTCCACC  
ATGATTAAAG TTTTCTNAGG CCTCTCCAGC CATGCTGAAC TGTGAGTCAA TTAACCTCT TTCCTTTAA AATTACCCAG  
TCCAGGNAT GTCTTCATTA GCAACCTCAG AGCAGATTAG NCACAATTCC ACAACTTGA GAATNGGTGT TCAAGTTTCA  
CTCTGGCCTT NAACAACCCA AAATTTA

SEQ ID NO:476: (Length of Sequence = 351 Nucleotides)

CGCCGCTAGG GCGGCGGGG GTGCGGACGC CGGGCTAGGG GCGCGTCATG TGGCCGCTCA CGGTCCCGCC GNCCTGCTG  
CTGCTGCTGT GCTCAGGCTT GCGCGGACAG ACTCTCTTCC AGAACCAGAG AGAGGGCTGG CAGCTGTACA CCTCAGCCCA  
GGCCCCNAC GGGAAATGCA TCTNCACGGC CGTATCCCA GCGCAGAGTA CCGCTCTCG AGATGGCAGG AGTCGGGAGC  
TGCGGCAACT NATGGAGAAG GTNCAGAACG TCTCCAGTC CATGGAGGTC CTTNAGTTNC GGACGTATCG CGACCTCCAG  
TATGTACGCG GCATGGAGAC CCTCATTCCG A

SEQ ID NO:477: (Length of Sequence = 333 Nucleotides)

GGTCTCACTC CGTCATCCAA GCTGGAGTGC AGTGGTGCAA TCCTCAACTC ACTGCAACCT CCGCTCCCGG TTTGAGTGAT  
TCTCATGCCT CAGCCTCCCG AGTAGCTGGG ATTACAGGCA TGAGCCACTG TGCCAGCTG GGATATAGAA TCTAAGAGTT  
GATTGTGGAA AACACGTGAA TCTATTGCCG GCATTNTCA TTTAGCAAGA TGGCAGCAGT CCAGCTGTTT TTTGCAGCTG  
GAGATGAAT TTTAAAATC CCCTTCACAC TTAATGTACT GACCGAGACA GAAGTACCTG AAAAAACAGT NTGCATGGCA  
GGCCCGCAA TAG

SEQ ID NO:478: (Length of Sequence = 458 Nucleotides)

ACATGTTAAA ATAAGTAAT ATGAAATAAT CTAAAAAAA AAAAAGTGCA GAACCAAGAC CTCTGTGATA ATCCTATTTA  
AAAAAATAGC TACAATTTTA GTTAGAATGT TTCCCTTATG AGAAAGCATT TTCTGCATAA CTTTAAATGT ACTGACCTTT  
TCCAAGCTTG CTGAGCTGGC CTTTGTCTCA ACTCACTTGG GACACCCCTC CCTGTGCTC ACCAGGGCCC ACCCAAGTC  
CCAGTTTCTC TAGGGGGTCT CTCGGGACCC CTGAATCCC TTNCTGATT TGTGCTGCCT TTAGCAGNCG GAATGGGCTG



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GCAGACCACC CTACATNCTC CTGTGTGTGG GGACACTGTC AGGNTGTCCT CCTGCAATTA GNCCTGCTG AGTTTCCTAC  
CATGTGNCCTA GGATGGNGTC CATAGTCGGG GCATNAAGGA CTTAGGATGG GCCCAGTC

SEQ ID NO:479: (Length of Sequence = 360 Nucleotides)

GCATCGTATC TNCITTTAAGA AAAACACTTC TTCAAAATCC TACACTATGA AAAACTGTCT TCAGGAATTG TTTATTGGT  
CCGTGATCT AGTGAGGCTG AGTTCTTAAA TCTTTCACCC CCAAGTTAAA AATTGGAGCA ACAAACAAA ACTCCAGCAA  
GGCATAAATA AGATATTAAA GTGCATATAT ACAATACCAG AAAAGTTTAG ATTGGGAACA GCAAAATTT CTAGTGCAAA  
AACTGCTTTT GCCAGCAAAG CTCCCTCTCT GGAATCAAAG GGCTACAGTA AAAGTTAAAA TTGGAACAGG NTTAAGCAAT  
GTCTGTCTTT AGTCACAAGT NAATATATGT GCATGCACCC

SEQ ID NO:480: (Length of Sequence = 322 Nucleotides)

GAAATTAAGT CTAAGCAAAA AGAAAAATAA AATGACGAGT TACTGGGTGC AGCACACCAA CATGGCACAT GTATACATAT  
GTAACAAACC TGCCCATCAT GCACATGTAC CCTAAAACCT AAAGTATAAT AAAAAAAAAA AAANTGAAAA GCTTCAGCCA  
GAGGTCACAA TGCTCACAAC TCATTGACCA AACTATCTC ATACCCGINT TAGAGCANGG NGCAGGAAAG CAAAACCAT  
CTCTTACTG TTCACTGGNA TACAAGTTCC ATGAGGGGAT GCAATTTNIN TCTTGNCAC TCTGTGTCC TCAGGGTATA  
GG

SEQ ID NO:481: (Length of Sequence = 369 Nucleotides)

CCTGGGCAAA GCATTGATCT GGTAGCCTTG CTCCAGAAGC CTGTCTCTCA CAGTCAAGCC TCAGAAGCCA ACTCCTTTGA  
AACTTCCAA CAGCAGGGCT TTGGCCAAGC CCTGTGNTTC ACAAATTCGC AACACAACAA TCAGATGGCA CCAGGGACTG  
GCAGCTCCAC TGCCGTCAAC TCCTGTTCTC CTCAGAGCCT GTCATCCGTC CTGGGCTCAG GATTTGGAGA GCTTGACCA  
CCAAAATGG CAAACATCAC CAGCTCCAG ATTTTGGACC AGTTGAAAGC TCCGAGTTTG GNCAGTTT ANCAACANCC  
CAAGTACACA GCAGATAGG TACAAGTCAA CCTACAACT ACTACTTCT

SEQ ID NO:482: (Length of Sequence = 255 Nucleotides)

GAGAGAATCT CGCTCTGTG CCCAGGCTGG AGTGCACTGG CGCAATCCCG GCTCACTGCA ACCTCCGCCT CCGGGTTCA  
AGTGATTCTN CTGCCTCGGC CTCCCCAGTA GTTGGGATTA CCGGTGCACA CCACCGCACC CGGCTGATTT TTTGTATTTT  
TGGTAGAGAT GGAGTTTCAC CATGGCTGGG CTGGTCTGA ACTCCGATC TCAGGTGATC TGCCCGCCTC AGGCTACCAG  
AGINCTGGGG TIACA

SEQ ID NO:483: (Length of Sequence = 353 Nucleotides)

CTGGATAATC AGGGCCATGT GCTTTAACAG GATGTAAAGG GGAAGCTCAT GATTAAACAT GGGAAATATG CAGCAAATTG  
CAAGACCTGA GCTTAACCGC ATAATTAGAA CATAATTTN CACTTCTTCC AGAGCATCAG CCAAGCAAAG GACTGAGAAA  
TCTGCAACCC AATTGTCTTA AAAAGAACT TAGGCTTCAC ATTGTGACA TAATTTCTTT TAAATGAAT ATAAATTTT  
ATTTTINATA TTTGTAGAGC ATAGGATGAT TGAATCCAG TTGTGTTTT ATCTGACCTC CATATCTAAT ATGGCTAGTG  
CCGTTACTAC TCTACAGAAC GCGCAATAAG TCA

SEQ ID NO:484: (Length of Sequence = 371 Nucleotides)

GACCCAGAAA ATGGAGCTAG CTACATTTCT CACACTTACT GTCATAATTA CATGTTTATA TTCTATTAGT TGTAATTATT  
TTTACCTAT CCTCTCATTA GAATGTTATA CCTATAGAGC AGATACCATT CCAGTTTAA TTTTGTGCCC CGACTCCTAG  
TAAGTACGTG ACCTATTACA GGGAACTTAA AACAAACAAA AAGTCTGCTG AGTCTGGGAT GTTTTAAGGA TCGAAGGAAC  
ATGTTGGTCC AATTGCGCT CACAGAGGGT TACCTCTGCT TTTCTACGA ATGTGGAATT GCTCCCATGT GGATTTTAA  
GGAATCCAG TCTACCCTCA GGGGAAGGNC CACATGTAAT GCCAGAGTC T

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SEQ ID NO:485: (Length of Sequence = 376 Nucleotides)

GGTCCGACGC TGTGTCAAGC TCTGCACCGG CCATGAGTAT GCAGCCAAGA TCATCAACAC CAAGAAGCTG TCAGCCAGAG  
 ATCACCAGAA GCTGGAGAGA GAGGCTCGGN TCTGCCGCCT TCTGAAGCAT TCCAACATCG TCGTCTCCA CGACAGCATC  
 TCCGAGGAGG GCTTCCACTA CTTGGTCTTC GATCTGGTCA CTGGTGGGGA GCTCTTTGAA GACATTGTGG CGAGAGAGTA  
 CTACAGGAG GGTGATGCCA GTCAGTGTAT CCAGCAGATC CTGGGAGGCC GTTCTCCATT GTAACCAAAT GGGGGTCGTC  
 CACAGAGACC TCAAGCCGGA GAACCTGCTT CTNGCCAGCA AAGTNCAAAG GGGCTT

SEQ ID NO:486: (Length of Sequence = 396 Nucleotides)

TTGATATTTG TGTCTAATTC CAGCTACTTT GAAAGCTAAG GCAAGGGGAT TACTGTATTA ATAAATTCTC ATGCTGTAA  
 TAAAGACATA ACCAAGACTG GATAATTCAT AATGAAAAAG GTTAATGGCC TCACAGTTTC ACATGGCTGG GGAGGTCTCA  
 CAATTATTGG AGCAAACAAG AGACTTTGTT CAGGGGAATC TCCACTTATA AAACCATCAG ATCAGTGAG ACTTTTTTGC  
 TATCATGAGA ACAGCATGGG AAAATCCAC CCCATGATT CAATTACCTC CCACAGGTC CCTCCCAGGG ACATGTGGAG  
 ATTATTACAA TTCAAGATGA GATTGGTTG GGGACAGAGA GGCCAAACCA TATCAATTAC TTAAGGCTAG GGGTTT

SEQ ID NO:487: (Length of Sequence = 375 Nucleotides)

TGATTAAAAT AATAGAGTTT AGTAATATGG ATGAATATA GATAAATATT TAAAAAGCAG TTGTATTTTT ATAGCCAGC  
 AAGATAAAGT TCAAATATGT ATTTTTTATA AAGATGGATT TACAATAACA TCAAAAATTA AAATGCACCT TGAAATAATA  
 AAGACATGTA AACCCTTTTA TGAGACAGA TTTTTTAANG CATTTTTAAA AATNCTTTTT CATTGACAAA TAATTATCCN  
 TATTINTGGG GTACACAGTA ATGTTTCAAT ACATATAATA AATAGTGATC AGATCAGAAT AATCAGCTTA TCCATCATTT  
 CAAACACTTA TCATTTCINT GTGTAGGGG CCATTCAACA TCCGCTTCT GGCIA

SEQ ID NO:488: (Length of Sequence = 323 Nucleotides)

CACTGCATTA ATGATTGNT TAACAGTATA TAAACAAGGG CCATGGTTTT TTTTACTAAA GTAGGTCTGA AAGATCAATA  
 TAAATACTAA TGGGGGCAGG GAGGAGTGT TTATACCCCA AACTCCAATA TTCCAGCTCT GTGTCTGTC CTATTATTAT  
 AATTGTAAA AATCTTAACG ACGCAGTGAT TCGAGTTTC GTAACITCAA TGATGTGTTA GAGGACAATG CATCTTGGTT  
 TGAAGAATTT GCTGTATCCG AAGGCCGGA AAGTACTOGA CCACGATGAT TAAATACATA AAAGGATGGG TGATTCCCTA  
 CCG

SEQ ID NO:489: (Length of Sequence = 326 Nucleotides)

TTACCTTTTA CTCTGATCAT AATCTCCAC CTGTCTAAGA GGTTATTTAT TCCTTATTTA GAGGGCCTCT ATTGCCATGT  
 GCCTGGAATT ATTATATGCT CATCACTTTA TGAAGAATAA AATTGTCTT TCCGCTTTA AAGTTACATT CGTCTTCCG  
 CTCAAATCCT GATCTGGTCC ATTAAAGAGT GTTCGCAGAC AAAGTTTCTG AAAGATTAGA GAAGAATCCC CCCCAAGATT  
 GCCCCAACAC TGAACACAG ACAACACTA TTTTATTTAA ATAAGGNGAC AGCTTTCTAA AAGTATACAT TCCTTAATA  
 AAAATA

SEQ ID NO:490: (Length of Sequence = 186 Nucleotides)

CTCAGATCCA TCAAGATGTG AAACCTGCAA GTTTGGTGCA GAGAAGGTAC ATGGGTTTCC TTCTTTTCTC ATCTGTATTC  
 CCTTTCTGCT AATTATTTTC TTTGCCACAT ACTAGCCAGC AAACCAGGCA CCTTTGCCAG AGCCATTAAG CTACAAAAAT  
 ACTTAATATT TTAATTTGAA CTCTGC

SEQ ID NO:491: (Length of Sequence = 347 Nucleotides)

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CCTGTACTTG TGTCCCTCA TTCACTTAAT TATGATACCT GCCTGGCATC TTGCAGGTTT CTGATGCTGT TACCCAGTA  
 TAGACCAAGT GCAGACAGAA TTTCATTTCT GCTTTATTAA GGCACAGTCT TGAGAAACCC ATTGGCTTCA CACACAATTA  
 ATTAATTINT GGCAACAAGC TACTATATTG GCTTGCATGT CACTTTCACC TCTCTGGGCA TTAGTTTINCT CTAATATTTA  
 TAAAAGAAGG ACATGACTTT CTAAGGTTCC TTGCAGTAAT TATGCAGTTC TATTCTAATA GATGCTTAAG CATAAAACCC  
 ATTTTAATAC TGTCCAAGG ATCCAGG

SEQ ID NO:492: (Length of Sequence = 320 Nucleotides)

GAATTTGGNT CCAAAGTTTG GACATTGCAT TTCAATTAATA CGTCCCTTAA GTTATTTTAA ATCTGTATTT TCCTCCTCCC  
 TTTTGTGTTT TTGTAAATCT CTTTTTGTCT TTGTTTTCGG TTAAAGAAAC CATGTTTTTT TCGTCTGTG AGTGGCTCCT  
 GTTCAGAAAT TACTGATTT CATCTGCTGG TATCAATTAG CATGTTGCTC TGTCGCGCT AGTACTTTAA ACTAGACGTT  
 AGATCTAGAG ATGTGATCTA CTTGGGTAGG ACTTTGTCAA GAATACTTGT AAGTAGGIAT TTAGGTACCA GGGGNCACAT

SEQ ID NO:493: (Length of Sequence = 339 Nucleotides)

TGCCAAGTTT GCTGGAACAT TATCAGATGG CTTAGGGAAG ACGATGGACA ATCGGCATCA GTCAGAGCGG GAGTACATCA  
 GGTACCATGC AGCCACAAGT GGTGAACACC TTGTAGCCGG CATCCATGGC CTGGCTCATG GTATCATTGG TGGACTGACC  
 AGTGTATATA CTTGACAGT GGAAGGTGTG AAAACAGAAG GGGGTGTCTG CGGTTTCATA TCTGGCCTTG GAAAGGGCT  
 TGTGCGCACT GTAACCAAGC CANTGGCAGG CGCCCTGGAT TTGTCATCAG AAACAGNCCA GCGGTGAGA GACACAGNCA  
 CACTTCAGCG GCCCCAGGN

SEQ ID NO:494: (Length of Sequence = 366 Nucleotides)

GTAGGCCCTT GGAAAGTAAT TAGGATTAGA TAAATCATC AGGGTGGGGC CACCATAATG GGGCTGGTGG CTTTATAAGA  
 GGAAGAGAGA CTTGAGCTGA CACGCATGTA CTTCCTCTCT TGTATGTGG TGCCCTCAGC CATGTTAGGG CACAGCAAGA  
 AGGCCCTCAC CAGATATTGG GGTGGTCTTN GACCTCCAC CCTCCAGAAC TGTAAGAAAT AGATTTTTTT ATATATTACC  
 CAGTCTATGA TATTCTGTTA CGGNAACAGN AACAGACTA AGACAAGCTT CTAAACAAA TTGANAATAG AGTTTAAAGA  
 TNCAGACTTT CATGCGCTTT AACAGGGGCC AAGAATATCT ATTTCA

SEQ ID NO:495: (Length of Sequence = 384 Nucleotides)

CGAGGAAGGC AAGAAGCGCA GGGGTGGGCC CGCTGGCGT CGGTGGCTC CGCTCCTGCT CGCAGCCCT GTGGTCAGAG  
 CTGGATACAA GATTCAAGAC CCTTCNITG CTGTINACCC GCTCCAGGTT GGAGCCACAG ACACCCACCG CCACCCGGC  
 TGGGTCTGCN TCCTTCTCTG TGCTTTCCC TCAGAAATGC GGCCTCAGAC CTAGAAGCTC AACCCCTTA TGAGGGCCAC  
 GTCTGGGGT AGCTCCTGAC CTNCGACCTT ATGTCCAAAT TTCACACCA TGGTTTTTCA TTTGACCCGG CCCCTTCTCG  
 CTCATAATGA CAACNAGCTT CCTTTGAGAG GGATCAGAGN CCAATTGCAC AAGGAGGAGC CGCT

SEQ ID NO:496: (Length of Sequence = 342 Nucleotides)

TACCTTAGTA AATGCAATTT TCGAACAGGC CCCCATCTC AACTGGTATA GCATCTTCCA CACCTGTAG CCTTCAAACA  
 TCACCTGTAA AAATACTGCC CATTCATGT CATGTATATC TGCCCATTTA TGGGAGCAGT GAGTGGAAAC CTGACAGTGA  
 CGGACTTTAA GCTGTACTTC AAAAATGTG AGAGGGACCC GCATTTTATC CTTGATGTTT CCCTTGGAGT GATCAGCAGA  
 GTGGAGAAGA TTGTGNCAC AGAGCCATGG AGACAATTCC TGTGGTATAG AGATAGTGTG CAAGGATATG AGGAACCTGC  
 GGCTTGCTTA TAAACAGGA AG

SEQ ID NO:497: (Length of Sequence = 273 Nucleotides)

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GATTTATTAA GTATCCCCGA AAATATAAAC ACAAAACCACT AAAAAACAAA ACCGTAAAAC GTCAGGCCTG GAGCTGCAAT  
 AAGACAGAGA CAGGAGCAGC TCACACGTGG CCTAGGTGGG GAGGACGAGG CCATAAATAC TGCAGGAGGG CGGCAAGGGA  
 GCCCTAGGGC GAGGGGAAAG CAGGGTGTGG GCAGCGAGAT GGNTOCNGG GTTTAGACAC TGCTGGCTTC GGNCCCGGCC  
 GGCACCANGA CTCTCACTTC CAGTGCAG CAG

SEQ ID NO:498: (Length of Sequence = 319 Nucleotides)

ATTCCCAAAA ATAGAGTCTG GACCTCTTAC CGCTACAAAT TCCAGGTCT CAGGTACAGC CTGAGAGTAT GCAGATATAA  
 TACACCACAG ATGATTCTCT CCCTTTTTIG TTTTTTTTTT TTTTTTTTTT TTTTGAGACA GAATCTCATT CTGTCACCCA  
 GGNVGGAGTG CAGTGGGCTG ATCTCGGCTC ANTACTTCTC CCGCCTCCNG GNTTCAAGCA ATTCTCCTGC CTNAGCCTCC  
 CGAGTAGCTG GGNCTACAGG NGCACACCAC CATGCCCATC CAATTTTTGG ATTTTAAGTA TAGTTGGGGT TTCACCATT

SEQ ID NO:499: (Length of Sequence = 408 Nucleotides)

GAGAAATACC TAATGTGAAT GACGAGTTGA TGGGTGCAGC ACACCAACAT GGCACATGTA TACCTATGTA ACAAACCTGC  
 ACATTGTGAC ATGTACTCTA GAACTTAAAG TATAATAATA AAAAAAGAGA ACCTTTAAAA AAAAATAGAC TGCCAGATAG  
 ACTAATAAAT AAAAAAGAGA GGTGAAATA ATCATAAATG ACTAAGGGGA TGTTACCCCA CAGAACTACA AAAACAAAC  
 AAAAAAACCT CAGAGACTAC TAAACACTC CTATGCACAC AAAGTAGAAA ACCTAGAAGA AATGGGTAAA TTTCTGGAAA  
 CATAACCCA CCGAAGATTG AACCAGGGAG AGATTAAAGC CCTGAACAGA CTAATAATGG NGTTTCAAAA ATTGAATCAG  
 TAATAAAA

SEQ ID NO:500: (Length of Sequence = 474 Nucleotides)

TTTTATTTTT TTCACTGTTA CTGTTTTNA TCTTGATG ATAAAAATGA AAATGCCAAA ATGAGGGTTA GCTTAATTTA  
 AAGTATAAGC GTAGTTAGCA GCTTTINCTA ATCACTCTG TCCATTTAAA AAATAATCCT CATAGGAGTA TAAACAGAGG  
 AAGGAGAAAT GGAGGATGGG CTTAAGAGAA AGAGTATTC ACAAATGTCT GCATAGCAAA TTCAATTCAT CTACCTAGTA  
 GCTCCTCCG TGTTAACCTA CAGGTGTCT CCCCTCCAAA AAAAAGCATC TTTTAGGAAG AAACCACCTT AACACTACCT  
 TTAGANGATT GAACTTCCAG GGATAGGTTG TTTGAGAGAA TCACCAAAAG CCATTTTAA ATGAATTTTT AAATTACGGC  
 TTTCTCATTC CTATAATAG TGTAGCAGCC ACCTTCCCTC TACTATGGAA CTTTTAACCA ATAATCCAAG TCCT

SEQ ID NO:501: (Length of Sequence = 378 Nucleotides)

GTGGTGGCGG GCGCCTGACC TCGTGATCCG CCCGCTCAG CCTCCCAAAG TGTGGGATT ACAGGCGTGA GCACCGCACC  
 CGGCCCTTGT GTACATTTTT ATAAGAGAAT TTTTTTAGCT AGGAGTTCAG AATTTTTAAA GTACCATTTG AATGATCTTA  
 ATTTTNCITT CATGACAACA CATTCAAAA TGAATCATGC TTATGTACTA AGAGGGAAAA TGTATTTAAG NTAAGGGTGA  
 GAGACTTAAG TTATAGGTGA CCTTAGAGAC CTAAGGTGAG AGACTTGACA CATGGAAGGA GTAACATTAG GSTCTACCTC  
 TACCTCAATT TAGTTAGCGA TTTACTACAA TTTAGAGCT AACAAAAGTA AAAATAAA

SEQ ID NO:502: (Length of Sequence = 448 Nucleotides)

TTTTGGAGAT GGAGTCTTGC TCTGTTGCC AGGCTGGAGT TCAATGGCAC AAACCTGGCT CACTGCAACC TCCGCTCC  
 AGTTTCAAGC AATTTTCTG CCTCAGCTC CCGAGTAGCT GGAATACAG GCACACGCCA CCATGCCAG CTAATTTTTG  
 TATTTTAGTA GAGACGGGGG TTTCACCATG TTGCCAGGC TGGTCTCAA CTCCTGAAC TCGGTGATCC ACTCCCTCGG  
 CCTCCCAAAG GGTGGGATT GCAGGCGTGA GCACACGNC CAGCCATGAT CCTTAACTT GTTTTAAGAG GTATAATAAC  
 TGGAAATCAT GATGCTCTT AAGGAATACC AATTGGATGT ATTATGATG TATTTAATTC CATCCATATG NAGTAGAAAC  
 AGTTTTCATT AGCAGAAGGC AATTATATTA TAGCTACACA ATATAAAG

SEQ ID NO:503: (Length of Sequence = 446 Nucleotides)

CTACAGTACC CATCTCCATT TTCAGAGAGC TCCGATGGAA ATTCTATGA ACTAATTCTC CTGCACATAC TTTGGTACAA  
 GTGGGCTACT GGAGCCACCT TCCTTCGTTT AATCAAACAG CATTTATTCA GCTTATTTAA TGAACACTAT CCAAGATACT  
 TGGGGGACAG AAATGAAAAG ATGGGGAGAC CTGTCAAACA TATGGTACTA TGTCTATGCA AAATAACATT GGAATGTAGA  
 TTCACAGTGG AAGGCAGGGC AGGCATGGAA GAATTCGTAG AATGAGTGTG ACAGCTCCTA CCTGTAAACAG CTCTTCAAGC  
 TCCTGCTGGA AGCGGTCAGT CAGCAAATCT ACTAGCTGGC TGGGGGCAAA AGTCCGCCCC GCTGGAGGAA AGTGAATTCC  
 GGGATTTACA GAGCAGGTAG AGGCATGCG GCCCAGCCCT CAAGCA

SEQ ID NO:504: (Length of Sequence = 248 Nucleotides)

TTCCTCTTCT TTCTTACCAT GGAACGTCC TTCTCAGGGG ATTTTINAGGT CTCGGTGTIT CTGTGTTTCT NAATAGGCAG  
 TTTCTGCTG TCGGCTAAGG GCTTATCCAG GNCATATCC AGAGCCCTGT AGGGGTGCTT GGGGCTTTG TCATCTCTGT  
 CGCTGGGCAG AGCATTCTCA GGCATCTCCT CTGTACGAT GTCCACCTGC TGGGCAAGGG CGATGTCTTC GTGCTCTCC  
 GTGGGCAA

SEQ ID NO:505: (Length of Sequence = 367 Nucleotides)

GCTATGTTGC CCAGGCTGTT CTCAAACCT TGAGCTCAAG CAGTCTCTC ACCTGTCTCC CAAAGTCTG GGATTACAGG  
 CATGAGCGAC TGINCTGGGC TTAATAAATT TTAAGAATT TGTGTGAAC CATCTGCTGA TCATGGAGCA GCAGAGAAAT  
 TTATTGACAG ATTTTCTAGG GTCATCCTG ATGACAATCT GNTGCCAGAA CAAGCCTGTA ATGCTGATGA AACATCACTG  
 TTCGGCATT ATTGCTCCAG AAAGATACTG ACTACAGCTG ATGCAAAGGC CCTGTAGGC AGTAAGGATG CCAAGGACAG  
 AATAACTGTT CTGAATGTG CTAATAATGC AGCAGGCATT CAATAAG

SEQ ID NO:506: (Length of Sequence = 419 Nucleotides)

ACACCTGGTG ACTTTAGCTA TGCTATCAA AAGCCTGAGG AAACAACCAG GTCCCCAGAT GAAGAAGATT ATGACTATGA  
 GTCTTATGAG AAGACCACCC GGACCTCAGA TGTGGGTGGC TATTACTATG AGAAGATAGA GAGAACCACA AAATCTCCAA  
 GTGACAGTGG CTACTCTTAT GAGACCATG GGAAACTAC CAAGACCCCT GAAGATGGTG ACTATTCTTA TGAAATTATT  
 GAGAAGACCA CACGGACCCC TGAAGAGGGT GGGTACTCAT ATGACATAAG TGAAAGACC ACCAGCCCCC CCGAAGTGAG  
 TGGTTACAGC TATGAAAAGA CTGAGAGGTC TAGAAGGCTT CTGGGATGAC ATCAGCAATG GCTATGGATG GACTCTAAGG  
 ATGGTTGGCC ACACAACCT

SEQ ID NO:507: (Length of Sequence = 417 Nucleotides)

GAAAACTATT TTACTTAAAA AATATTCTAT TACTTCAATG TCATGTCTGT TGAACGAGGA ACTCAACATG CTTATTINCC  
 TTTGGTTCCA AGAAAAACCC AAGTCTAACC AAATGTATGC CACAAGGAAC TGCCAACTGG GTTAAAGCTT GGTATTTTCC  
 TGGTTATCAC CCTATTTCCT GGGTAGGAC CTGGGGTTTA ATAGAGACAT TTACATAAAA AAGGTATTTG GTTAAACAA  
 GAAATATGCA TGCNCTTCCT TACCACCTTC CTGGGAAAGA ACTGCTTTT TTNCCTTCTT TCTGTGAATC TTGTCAAGA  
 CATCTGTAG TTTAGATATA TGGCTGCTT CTTTTTACC CTCAAGCTTT TAGGTGACAC TTATAAAGGT GAGCATATCA  
 TTCTATAAAA TGAAGA

SEQ ID NO:508: (Length of Sequence = 308 Nucleotides)

CTGTTTAGAA AAAAAAGTGC AGCTCACTGT CAGCACTCAT TGAATTTTGC ATAAACATGC TTTTGGAGGC TGAAGCAAAT  
 CTGACTGATT TTCAATGTGA AAATAAATA TAAANCTGT TTTTAGAGTT ATTTATTAAC AGAACTAACA TCAGAATTAT  
 TTGAATCACC AGAATAATCA ATTCTGGAAA AATCAGATT ATCAGATTAA TCTTTGGCCA ACAACTGTTT AAGAACAATG  
 TTAACATCTG CATGSCAATG CTACATTINC TAGGATTTGA CATTTTCAGC AATTGAGGAA TTACTATA

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SEQ ID NO:509: (Length of Sequence = 370 Nucleotides)

TTTTTGAGAC GGAGTTTCAC TCTTGTGGC CAGGCTGGAG TGCAATGGCA TGATCTGGC TCACCGCAAC CTCGGCTCC  
 CGGGTTCAAG CGATTCTCCT GCCTCAGCCT CCCAAGTAGC TGGGATTACA GGCACGCGCC ACCACGCTG GCTGATTTTN  
 TATTTTTAGT AGACACGGGT TTTCACCATG TTGGTCAGGC TGGTCTCAA CTCCCGACCT CAAGTAGTCT GCCTGCCTCA  
 ACCTCCCAA GTGCTGGGAT TACAGGCGTG AGCACTTGGC CCTGGCCGTG ACTGATTTTT TTTCATGTAG AATTGTCAAC  
 ACGAGAGATC ACAAGTGGAG CACTTTGAAA GACCGTGGT TGTGTGCACG

SEQ ID NO:510: (Length of Sequence = 446 Nucleotides)

TCTTCTCTCT TACTTCTCTT CCTTCCCTCC TTTCATATGA GAGACTCTAT ATGGAAAAGG AAGCTGAAGT GGCCTGCACA  
 CGATATAGAA AAGCCATATT ACCTTCTTAA GACTGGTAAT CCGSCAATAC CTAATGCAGC ACATGGCTAG AGACTCCACA  
 TTGCCCCAAC TCTCTGCTC ATCATTTGCC ACTGTTCTGT AAATTTCCCA GTCCCTCAC AGAAAGCACA TGGCACCATT  
 TAAAATGGCT GCTCACTCTC TAAGGGAGGT CTCACAGGCT GGTAGTGAGC CCTGTCCCAA TAGTGAAGTT CTCCACAAAT  
 GGGGAGACTT CTCCAGGAG GAGGGGAGGC CTGGAGATGG GCATGCAGTG GGCAATGTCA GCTGCCCTCC AGGTCTCTGC  
 TTGCCCTTTT TCCGCCCTGG GTCAATATAC AAGCTTTCGG GGGACA

SEQ ID NO:511: (Length of Sequence = 354 Nucleotides)

AATACCAAAC TGAACAAACC TGCTCTTTC TGGTTAAAC AAAAAAAAAA AAACAAAAC AAACAAACAA AAAAAATCAC  
 ACAGTTTAAT AAAGANGCAA CTCTTCTT TTAGNGCAA GGACTACCAA TCTAATCTCT ATCTATTGAG CCCCCAAAAG  
 CTCCCTTCAG AGCTTTCTT CTCTTTATCA ACAGAAAAGT CTAGAATGAN TATTCACAGT TTCTAAGAA AACCAGAAAG  
 CCTTTAAGCA GCATTAGCTG GNCATATTTC TG TCTCTAT AGTACCATA GATGAGTACA GCTTTACACT AGGGGGCTGG  
 GAGTTTCAGAC TCACAGCAGA GACTNCTGGG GTAG

SEQ ID NO:512: (Length of Sequence = 374 Nucleotides)

CATGTATATT ACAAAAAAGT TCTGTACCA AAGTCTTAT TAGACTTAT TTTTGTTTT TTAATTTTAA AAATTTTTTT  
 TGTTTTTTATT TTTATTTTT AAATTINCCT TCTCGTGGT GACTGTCTAT TGATTGTCTC AGTTTCTGGA CCAACAAAC  
 AACTAATAA TTTTAAATCT GAAACAGTGA TTGTCCCTTT NGGCTCATGT ATGTACAGGG TGATCAGAAG TGTACCTGT  
 TAGCAAAAGT GTCACGATGC TGCACTCTA CCGAACTGA TACCCACGAA CTACGGAATC TAAACAGACT ACACCTGTGA  
 ACTGCGTATT ACTGTCCACA ATGGGGATCT CCAAGACAA AAGAGSTATG GAAA

SEQ ID NO:513: (Length of Sequence = 463 Nucleotides)

ATCAGCAGAT TTNCTCTGG TGAATGTCTA ATCAGTGIGA TTCCATAGG CTATACTTAC CTTTTGGGG CTACTTGCCA  
 ATNATGTTTG GTCAGTATCC TTGCAACAA CAGAGTGACA GATTCTAAAA ATGACTTTGC AGGCCAGTAC TAAGAAAGAC  
 ACCAAGGTTT ATGGGCTTGC AAATAAAAAG TCATAACTT CCTGCCCTA CTTCACCAAG TGAAATCGAG TTCTCACAC  
 TTCTGCACAC AGCTCTTCA GGATCTTCCC TTCCCTTCAA GGCTGTCTGA TGTTCAGTTT AATTTGATTG TATTTGTATA  
 AAGTGCTGAG TGTGAGTCC TCAAAGAAAT TTACTTTCAG TCTAANGCCC CCTTGGGACA AGAAAGTGGC AACCAGGCAA  
 ATGATTGATT ACTTATTTGT TTGAGTATCA CTMTGTGATT GTCCAGGGC TGTATTACAC ATA

SEQ ID NO:514: (Length of Sequence = 396 Nucleotides)

CCAACCCAGA AAACGTTTCC TGGCTCTCTA CTAACAGTAA AATGTGCTGA GCCCAAATTT TCTGCTCTAA CATGGGTCCC  
 ACGGACCTAT CAGTCTGCTC TGGGGTCTG ACCTGCTGGG TCTGAGCAG GGTCTTTCCC TAAGCATCAC TGTGGGTTTG  
 GAGACAGCTG TAATGTGTGC AGCTGTGAGC AGAAAGTACA ATGCCACTGG GCTACATATG TCCATATCAT CCACCACCAT

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TTCCCACTGT AAAACCAAAG GCTGCACTG TGAACAAATG TGGACTTCCT CAAAGGACAA ATGAGGAGAC TGAAGGCTAC  
ATTTCTCTCT TTAGAAGCCC ATTAGAGAGT GTCTACAGTT ATACAACAGG TTTCTGCAAG ACCCTGTGSG TAACTT

SEQ ID NO:515: (Length of Sequence = 416 Nucleotides)

ACAAAACAAA AAGTAGTAGC ATCTCTGTGA GAGGTACACA GTTAGAAAA TGATTCCACA CACGAGTAAA GAGATTTACC  
AGGAAGAGTC TTGTTTCTTA AAAGTTGATA CAACTAGTAG AAAAATACTT GTCAGTGGTA AATAGAGCAG AAGTAGAAAA  
AGCAGTTAAT CTATTAGATC AGATCAGAGT GTAAGGCAGG TATATCAGGC CAAAGGTGAT AAGACAGAGC AGAAATAAAG  
TATTGTTAAT TCATGCATTT NCTGACTCAT TTATTTATAC ATTGATACTG TCACTTATAA ATCAAATCTT ACAGGTCAGG  
TTCTGTGCTA AGCTCAGGGG NTATAAAANG AAATANGTCA CTGCACTCGC CCTCACGGGG GCCCACCAGT ATAAGTGGGT  
AGATAGTTCT ATAAAG

SEQ ID NO:516: (Length of Sequence = 368 Nucleotides)

CCCATGGAGC TOGAGAACAT CGTAGCGAAC ACGGTGCTAC TCAAGGCCCG GGAAGGTGGC GGTGGAAATC GCAAAGGCCAA  
AAGCAAGAAA TGGGGGCAGA TGCTCCAGTT CCTCACATC AGCCAGTGGC AAGAGCTGCG GCTCAGCCTC GAGCGTGA  
ATCACAGCCT GTGCGAGCGG CANCCATTGG GCGCCTGCTG TTCCGAGAGT TCINTGCCAC GAGGCCGGAG CTNAGCCGCT  
GCGTCGCCCT CCTGGATGGG GTGGCCGAGT ATGAAGTGAC CCGGATNAC AAGCGGAAGG CATGTGGGCG GCANTAACCG  
CAGAATTTTC TNAGNCACAN GGGTCCTGAC CTCATCCCTG AGGTTCCT

SEQ ID NO:517: (Length of Sequence = 393 Nucleotides)

CCCAGCGCCT GGAGAGCCAG CCTGCGAGG TGGGCTGGGC GAGCCAACT GCGTTCCTGG TGCAGGGCTT CCGGTCTCCC  
TAACAGACCT TATACGCTGA COGGGGCCCG CCATGGCAGT GTCTCTTTGC TCAGACATCC AGGGACGACC ACAITGCTCC  
AACAGCGGTC GCTCCACCAA TCCTGGGAGA AGCGAATCGT TTTCTCCGCG TGCCCTGTCA GCGCTCATG GTGCCAGAG  
AGGAATTTTA GTGGCAGCAT TCOGGCTGTC ACGNCACGA AATTNCCAGG CCACTCCAG TCAGAAGGGA CCACCAGGAA  
AAGTCAGGAA GAGAACCACC ATCAAGGTCC CAGGCTCTTT TTTGTGACA AGGACTTAGA GGGGTTTGGG TCT

SEQ ID NO:518: (Length of Sequence = 465 Nucleotides)

CCTTCTCTGC AGATAGAAGA GCCAGAATGG GAAAAGCGAA GATCCATCAA CCTGTCTGAG CTCATTGATG TTTACAGTGA  
TGGTGTGAGAA CTACTCCAGA TGGTGAAGGC ACCAGATTCC AACTGCAGCA ACCTTCTGAT TACAACCAGA CAAAGCCTTG  
TNTGCTTCG GGGGCAAAAT CTGACACCTT ACTGGGCATT GAGACTTCAA GGCTGCGCA GCAGCCTACT CCTGGATATT  
TCACTGATGA TCAGACATTA GACTTCCTTC TGCAATACA GGATGGAGTT GGGATGAAAA AGATGATGGT TGTGGATGGT  
GACTCTGGGC TCCATTGTTT GGAGTTACCG TGCTCCGTTG TCACATGAAA GAAAACGGCC AGCCACCTCA GCAGTTACTT  
TCAGACCAGA AGTCTGTCTT TCCTCTCTG GGGCCGAAGG CTGTGTCAGT TGCATCTTCC CAATT

SEQ ID NO:519: (Length of Sequence = 382 Nucleotides)

GGCCGTGGT AACAGAAAAC TCAGTGATA CTGTGCTGTT GTTAGGTTGT CAATATAGTC TTTCTGTAGG ATGGATAGCA  
TGTTTGAGAG GTGCCAAACA AGAATTTTG GGGTAGTAG TGTGTCTTGT GGAGGGTATT ACAGGACTGT GTAATTATAG  
GACTCTAAT TGACATGGCT TGGCACCAC TTGCAGCTAG TGGGTACAGG GTACAAAAGA TGTTAGAGAA AAGCTCTACA  
GATTACGTAC TTCTGTGCTT TCGTATGCTC AACACTGTCC TTTGTCTC CATGAAAGAT GAAGGAAGCA AATTATGTA  
TGTTCTTTCT TTGACCTTCT TTAATCCTCT GATACTTTTT AGATTGCATG ATTTTACTAG GC

SEQ ID NO:520: (Length of Sequence = 304 Nucleotides)

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CCAAGACTGC TGATCTCTAA ACAAGCATCA AAACCCGAAG CTCATTAACA TCAGAGTGAG CTTCAATAAG GTGANCACTA  
CAATGATGTA CAATTACATC CTAATANTTC ANTGCCCAAG AGCCCTGTAG AACTATTGCA AGGCCCCAGN TTATCACAGT  
ATGCAAATGC ACTAGGAAAA TCATTACCTA TTTAGTCCCC TTTATTTTGG TGGGTTTAAC ATGAGAAGAG TAATCCATGC  
TACAAGACGA GATTTTCATTT TACAGCTGTA GTAGCCAAGT GCTTAAAAGC TTGANICTGT CCGA

SEQ ID NO:521: (Length of Sequence = 360 Nucleotides)

TTGAGACGGG GCTTTCCTCG TCACCCATGC TGGAGTGCG TGGGCTATC TCAGCTCACT ACAACCTCCA CCTCCAGGT  
CCAAGTGATT CTCCCGCCTC AGCTCCCAA GCAGCTGGGA TTACAGGCGT GAGTACCTG CCTCAGCCTC CCACAGTGCT  
GGGATTACAG GTGTGAGCCA CTGCGCCAGG CCTCCCAAGG TGTTGGGATT ACAGGCGTGA GCACCGCTCC GGGCCTCCCA  
CAGTGCTAGG ATTACAGGTG TCAGCTGCTG CACCTGGCAA TTTTITGATA TTAGGTCCCC TGAAGTCCAA AAAGAGATAT  
ATGGCTTATT TGGTATAATG AAATCATACA GGAAGGCATT

SEQ ID NO:522: (Length of Sequence = 287 Nucleotides)

TTGAGGAAGT TCTGTGTGCTG GTGAGGAAAT TCINTTGAGT TCTGTAGGAA TTTTATAGC TTGTTTGTCA TTCAGTTCTA  
TCAACAAGCC AGCAGCAACT CAAAGGGAAG CCTCCTNCTG GCATATCAAT CACACAGGCA CATAGGATCA TATAGCATAT  
AGGATCAGTC CCAAGAAGAA CTATNGGGTN GGGGAGAGGT TTTTCTTCCA CTTCTTGGGN TTCAGTGA CTGAGATGGA  
CCTCTTTTTT CCNVTGGACA AAATGTCATC ACACCAACAT CTTATTG

SEQ ID NO:523: (Length of Sequence = 318 Nucleotides)

CCTGTCTCT ACTAAAAATA CAAAATTAG CCGGCATGG TGTACGTGT CTGTNATCCC AGCTACTCGG GAGGCTGAGG  
CAGAAAAATT GCTTGAACCT GGGAGGCAGA GGTTCAGAC AGCTGAGATC ACTCCATTGC ACTCCAGCCT GGGCAACAAG  
AGCAAACTT TGTCTACAAG TCCTCTACG CTGACAGGTC CTCCTCACC TGAATCTTTT ACGCCAGCAG CGTCTCTTCA  
CTGACGTNCT TCINCATGCC GGAAATAGGA CCTTCCCTTG CCANCGGGCA GTGCTGGCTG CATGCAGTGC TTACTTTT

SEQ ID NO:524: (Length of Sequence = 238 Nucleotides)

ATCTCATTGG AGCCAGGGTT CCAATTCTCA TGCAAGTCGG CCACAGGAGC CACGGAACCG CAGTAGGATT TCTACTGTTA  
TACAGCCCTT GAGGCAGAAT GCAGCAGAAG TTGTGGACCT TACCGTTGAT GAAGATGGTA AATTGAAGTA GTAACAGTAG  
AAAATTATGA AAGGAGTTTG ATAAAGGAA ATCTCTTAAT ATGCTAGAAA CTCCTCCTGC TTACTGGTAA TATATTAT

SEQ ID NO:525: (Length of Sequence = 168 Nucleotides)

CCAATGAGTG TGGACCCTAA ATTTAAACAG CTAAAGCTAT AGTCTAAGGA CAGTCTCAA TAAATACCTT TGAATTGTCA  
TATGGTGCCC AGGAGGGTCT TGTGGAAGG GTTTCATGGT AGTGAAAGAT GTAATANCTC TTTTTCCTT TTAACCCCTAA  
GCCGTGCC

SEQ ID NO:526: (Length of Sequence = 387 Nucleotides)

GGAGGTCACA CGGTGAAACA GACACAGTTA TATACAACAG GGCAGGTTTT TAAAAAGAGT TGCTCTCAGA CGCATTTTTT  
CTGCTCCCTA AAAAGCCGAG GAAGATACTG GNTCCACAGA AAGAAAAGGC AATGCCGTAA CATGAGGCCC TCATGGCCGC  
ACCGTCCAGG GGAAGGGCTG TTAATAACAC AAGTATTCTT GTGAAATACT TCGATCTGAG CATTAAGGCA GGTCTGCAGG  
AGATCCGTCC TGGGGACTCG GACAGCAACG CTACCGGCTC CGAGAGGACA GTTAAATGTC GCCTCCCGGC AAGAGGGGGC  
GAGAGATCAG ACAAGGAGTT GTTCTGAGT TNAACCTGC TACAACAGCA AACTCCAATA AACTCAA

SEQ ID NO:527: (Length of Sequence = 336 Nucleotides)



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TTTGCAGTTT TACATTCCCC TAGTACATCC CTGCTTACTC GGGAGCACAA AGCTTGGTTG TAAGAAATTG TGATTGGAA  
GTAGAGAAAA GCAAGGAAGT CCAACCTCAG GAGTGTCTCT GTTACTAAGA GGAGAGTGAG ATCCAGGGTG TGGGAGATGA  
TCTGAAGGTC TATGGGTGGG GAGTGCCACA GGAAGAAGG TTCTGGTCGG AGTTAAAGGA GGATATATCT ATATNCTGGG  
AGATGAGCTG AATTCAGAAC ACATGGAATG GGAACAATTC TCCCCATACT GCGTTTAAGC CAAATTAGGC TGGCATCCCC  
CACCACGGCC AACTAA

SEQ ID NO:528: (Length of Sequence = 482 Nucleotides)

TTTTACTCTA GCGTGAGGAG GGGGCTCCT AAGGAAAGTC ATGCTGGGTA AACTGTGCGA TGTTACAGAG CACATTGAGT  
CTGTGGTCAT CGTGGTTCCT CTATCTTCAC TGTCACCTGT ATCTGTATAC ACATACTCAG TTCTTAATTG TAAGCTCAAT  
TTTGGTATTA GCAAAAGCAT CTGTCACTTT TTCCTCAATT ACTCACACCT CTCTTGCCCT AAATAAAACA AAGAAACAA  
GAAACAAGT GTGGTGTCTT TACACGTCTC GGGAGTTCCT CGTCACTGAC TTTATATATA TANAANAAG AATGCACATG  
CGGGCCACGT TCACAGATAG ACAGATTCAC CCGAAATTGA GGAATGAGGG GCCTTAAAGG CTGCCGANAA NCAAAATGGG  
GTGGAAATTA GCAANCCTG TTTTCCGGTC AATTNCCAAT TGTCACCTGG CTGCGTTGAG ACAAGNCCAT CTTCCAATTT  
CC

SEQ ID NO:529: (Length of Sequence = 412 Nucleotides)

CTCTCAGACA GTATCCTCCT CGAAGCAGGA ATCTAGTAA ATCTCATCTG CGGCATGCGA TTCCTAGTGC AGAGAGGGGA  
CCTGGGTTAT TAGAAAGTCC TTCAATATTT AACTTCACCTG CAGATCGATT AATTAATGGT GTCCGGAGTC CACAAACAAG  
GCAAGCAGGT CAAACTAGAA CACGGATTCA AAACCTTCA GCATATGCCA AGAGAGAGGC TGGGCTGGG CGTGTGGAGC  
CAGGCAGTCT CGAATCCTCT CCTGGTTTAG GGAGGGGAAG GAAGAATTC TTTGGCTACC GGAAGAAAAG GGAGGAGAAG  
TTTACAAGCA GCCAGACACA GTCTINCAAC GNCACCAAAG CCTCCGTGCG CAAGCTTTCG AGCTGGGGGC TTTTCCAGCT  
TTCCCTCCAT TA

SEQ ID NO:530: (Length of Sequence = 301 Nucleotides)

ACTTTTTAAT AATAGTCATT TAAAGTGGGT GAGATAATAT CTCATTGTGG TTTTNAATTG CATTCTCTCG ATGCTTAGTG  
GTGTTGAGCA TTTGTNCATA TAACINCTGG CCATTTGTAT GTCTTTTTTT TTTTTTTTTT TTTTTTTTGA GATGGAGTCT  
CACTTTGTCA CCCAGGCTGG AGTGCAGTGG CGCAATCTTG GCTTACTGCA ACCTCCACTT TCTGGGTCA AGTGATTCTC  
CTGCCTCAGC CTCCCAAGTA GCTGGGATTA CAGNGCCCA CCACCACGCC CAGCTAATTT T

SEQ ID NO:531: (Length of Sequence = 312 Nucleotides)

CAGATGAGAC CAGGCCTTGA CAGTGGGGGC AAGTCTTACC AACCTGCACA GCACATCCAG CAGGCAACT GTGGCTCAGC  
AGGTGCCAAA TGGAGCCCAT GGGCAGAAGA TGCCACAGC GTTCAGATG TGTGTGGTCT GAGAGATAAA AGGACACAGA  
ACAAGATGAC TGTGCAAATA GCCAAGTGGT GGCAGAAGTT CTGCATTTC AAGAGATGAT CCACTCAATA ATTTGACGAT  
ACTAGTTGGC CAACATGCTC AGAGAAAACA GNCCTATCCA CATCTGGAGC CTCATTCTCT CTCAGGATCA TT

SEQ ID NO:532: (Length of Sequence = 313 Nucleotides)

GCACAACCTC CGACCTTTGG GAGCAGCCAG GGAGGAGTCA CTGTCCAGC CCCCTGGCCT AGGCACAAAG GGGTGGGAGA  
GACAGCTGGG CCAATATGGT CTATTACCGC CTGAAACCCC GCGAACCAC CCTTAACTCT GCCTTCAGGC ATATCCCCC  
ACGTCCATGT CCAGGAGCCC CCTACTGTCT CTGGTCACT GTGGCCCGGG GAATAATGGA GGAGATGGTC TGGTCTGTGC  
TCGACACCTC AAACCTTTTG TGAGTATGTG GGGAGGGGCT GTGGGGGAGG AGGGCGTNAG GGCTCTGGGA TCT

SEQ ID NO:533: (Length of Sequence = 378 Nucleotides)

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GTAATCCAT GTGGCTGACT GGGTAACAGA TTTGAAGGT ATCAGAGACC TTCAATGTGT AGCTCATCGC AGTGTATTGT  
 TTGTTGCTTG TCTCTGCTC CCGTTGTATT GCCATCCTCA AGGGCAAAGA CTGCATCTTT GTATTCCCAG CTCCTAGGCC  
 TGAGTCAGGC ACATAGTAGG AATTCAGAAA GTATGTTTGG GATGTAACAT TCCTCCTTTT TCCTGGACAA AATGGCCTTT  
 TGTCCGGTGC ATTGTCTTTT CCATAGAGGA GGGGTTGGGG CAGGATTGTN AGATGACTGT GTTTGAATCT TCAGTTAGCT  
 AAGACAAGGA TACGTNITTT CCATGGTGCA AATCTAAAGG GTTCTAGTGA GGTGGTTC

SEQ ID NO:534: (Length of Sequence = 374 Nucleotides)

TTTTTTTTTT GTCCAAGGTT TATCAAATTA ATTGATTTTG GGGGCAAGA TAAAAATTTT NATTTGATTA ACTTTCTCTA  
 TTGGTTTTTG TTTTCAATTT CATTTATTTC TTCTTTTATC TTTATAATGT NCTTACATCT GCTTGGTTTG GGCTGGGCAC  
 AGGGGCTCAT GCCTGTAATC CCAGTACTTT GGGAGGCCAA GGTGGGCAGA TCACTTGAGA CCAGGAGTTT GAGACCAGCC  
 TGGCCAACAT GGCAGAAACC CGTCTCTGCT AGAAATATAG AAATTGGCCA GGTGTGGTGG CCAGCACCTG TGATCTTAGC  
 TACTCGAGAG GCTGAGGCAG GAGAATGGCG TGAACCCGGG AGGGCAGAGC TTGC

SEQ ID NO:535: (Length of Sequence = 433 Nucleotides)

TGCCGACTGA TTCCAAGTCC CCAGGAGGCG TGTGAATGCT AATAGATATT TGGGGTTTAT CTACATGGAT AAATCAGAAT  
 TGTTAACATT ATTTATAAAG ATAATACTTA CATAATTTTN AAATTCACAA AGATTGTTTG GCTTAATGAT TTCTAAATGT  
 ATGCAATATA ACATTAGGCG GCTTTTATTA ATTCTATTTA TGTAAATGGAA AAGCTCAATT CAGCAAAAAA CAGATCTGAT  
 GGGATTGGT TATTCTCTAC CTGATCAGAA CAAAGCCTTA CTTTACATTC CTGACTACCG ATTGGCTGAG GGATTGTCTA  
 ATAGAATGGA GCTTTCTTTT GAGCGGTATC CATGTGTACA AAATTGGGCT GCTTTACCTG TGACCCACCG ATTGCTGGAG  
 GAGCTTGA AA ATGTAGTCAG CCGTTTCTTT TGG

SEQ ID NO:536: (Length of Sequence = 438 Nucleotides)

GATGAATTAA GAGGGAAATT TATAAAGTAA AATCTTTAGC GCTGTTGATC AAAGAGTTCC AGGCCGGGCG TGGTGGCTCA  
 TGCCCTGTAAT CCCAGCACTT TGGGAGGCTG AGGTGGGCAG ATCAGCAGGT CAGGAGATCA AGACCATCCT AACACGGTGA  
 AACCCCATCT CTAATAAAAA TACAAAAAAT TAGCCGGGCA TGGTGGCAGG TGCCCTGTAGT CCCAGCTATT TGGGAGGCTG  
 AGGCAGAAGA GGAATTCCTG CAGCCCGGGG GATCCACTAG TTCTAGAGCG GCGGCCACCG CCGTTGGAGC TCCAGCTTTT  
 TTGTTCCCTT TAGTGAGGGT TAATTTGAG CTGCGGTAA ATCATGGGTC ATAGCTGTTT TCCTGTGTGA AATTGTTATC  
 CGNTCACAAT TCCACACAAC ATACGAGCCG GAAAGCAT

SEQ ID NO:537: (Length of Sequence = 316 Nucleotides)

TAGTAGCACT AAAGCCCGT TTTGGTCACA CTCTCACTA GGTGAGAACC TGACCAAAAA TGTGGAATTA TTAAACAAAA  
 TGATGGGAAG CCAATGINCT GAAACTGAGC TCTTGCACTA GGCCCCACA GACCAATTA AAATGGAGTC ACTAGTGCTA  
 AATGCTTTGG AGTCAAACAG AAATGTTAAA GAAGATAGAT CCCAAACAG AGCAGTGTTT TATTTTCTC CAGAAAACAG  
 GAGATTCCAG CATAATAAGA AAGTCTCCTC TGTGTAAACC CTTACAAAAA AGTAACCTGA AGTAACCATT TTTTTT

SEQ ID NO:538: (Length of Sequence = 303 Nucleotides)

ATCTTCATGG GGTCTTAAC TGTAACAAAA ACCCCACAAT TTGAACAGAA GAACAGAAGT ATCTGGTTAC AGAAGTGCAT  
 TCATACATTT CACAAATGTT TCAGTATCCT CTCTCCCCG ACCCCAGCAT GAGCTTAAT TGGATGTATT TATCTTTCA  
 CCAGCATGCC CATGAAGNG CTAAGGAAAA CATTTACCAA GTCTGTTTCA AAATCTGTCC TTGGCATATC AAACTTTTTC  
 TCTTCCTTTT TCATGCTTTT TTTTAAAAA AAAACACGGA GAAAGCGAAT AGAGAGGAAA GAG

SEQ ID NO:539: (Length of Sequence = 362 Nucleotides)

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CATGTCATAG TGGCCTGCTC TCCTAACACA GCACAATTA GGGCATATTT TCATGATGGT CTATCACTGG ATTACAACAC  
 ATCTCTTCAT TAAAGTCTTG GGAAAGAGGC TTCAACTTIN CTGTGTGAG AAAACTTCAC AGGTGTGTAA AGTTTGATCA  
 GTATGTATAA TATATTINAT TACATAIATT TNATTINAT TTTTCATTT TTTGCATACA TAGCAGGTGT ATATACTIAT  
 GGGTTATATG AGATATTTTG ATAAAGGCAT GCAATGTGTA ATAATCATAT CAGGGTAAAT GCAGTATCTA TCCATCACCC  
 CAAGCATTTA TCCTTTGTGT TACATACAGT CCAATTACAC TC

SEQ ID NO:540: (Length of Sequence = 416 Nucleotides)

CACCAGGGAG AACCAATACA ACAGAAAAA AGCAGAGAAC AGCTATGTGT CCTGCCAGGT CTACCAAGA TAGTCATCCA  
 AACATGAACA GATGAGAAGG CTGTTTTC AAGAAGTGAA AGTGACAGAN TATTCAATGA ATCTGAACAC ATGAAGATA  
 TGAGACACCA GTAGTTCAGC AATAAGTGA GAGAAACTA AGCAAATGAG AAACCTAGGA ACAATTATGC AGCAAGAAC  
 AACTGGATAA GCTGAAAAGT GTTTAAAGAT GCTGCCGTAA AACTAAGTA TCACAATCAA ATTCTGATTT GTAAAAATAG  
 AGGTATGGGA AGGGTACANG TATGTTGTG GGCACAAATG GTGAGGAGAG CTAAACCCT CTCTTCCTT AATGAGGAAT  
 TAAATAATCC CATTA

SEQ ID NO:541: (Length of Sequence = 341 Nucleotides)

GAAATACTTC CAGGCCCTCG AAAGGCCATC CTGTGGACAC ATGTAAAAAG CTGTCTTGTT GGCCCGTTAT TCCCCTGAC  
 CCGTCTGAGT GATCACCAG GAGCGGGCG GCAGCAAGCA GAGCTCACC GATTGCGGAC AAGGATTTTA AAGGCAGCTA  
 CAAAGCTGAG CTCTATTGTC TGATGATAGT CTCTGTTCAG CTGTTTAAA TGACTGTCTG ACTCACCATG GTAAATTTNC  
 ACAAATTA AACAATTTT GGGTGTGCA ACAGTGGTTC TCATCTTCC AGGCAGGCAG ATTATTTTAA TGCTGTTTAT  
 ACAGGAATT GGGACTCTCG G

SEQ ID NO:542: (Length of Sequence = 334 Nucleotides)

TTGTGTGTTT CTACCTTAAC CAATACCTCC TGGAAAAAG AGGTATTGGT ATAAAAATA ACCATACCCA AACATTCCCA  
 CAACATGACC TTAATAAGCT GGTGCACAGT AGATTATGGC AGAGGAAGA AATTGACTT TAGAATTAGA GAACTTAGG  
 TTCAAATCTC AGCTCTGTCA TGCTTTGGT GACCTTCAGT AAGTCCATT TNCITCATCT GTAAATGGG AATAACATCT  
 ACTCCACAGC ATCATTAGAA AGATTAAATA GTGGCTGGC ATGCTGCTC ATGCTGTAA TCCAGCACT TTTGGGGAGG  
 CTGAGGTGGG GCGG

SEQ ID NO:543: (Length of Sequence = 350 Nucleotides)

ATTTGTTTGC AATTGACAAC ACCTCATTA TGTAAAGCCC AGTGACACTG CTGTCTGTTT CAAGTCATT TTAATTACA  
 CACGTGCIAC TTAATCTTA AAGCAAAAT AACATTGGA CTGGTTTACA TTCAAGCTA CAATATGGAA CCATTGTAT  
 TGGAGGAATG AGTTTAAATAT GCATTGTAAA ATAAATTAG GGGTACTTT GCATTCACAG CGCTTATGT AATTAGGTC  
 AGTCAACTGT AATGTTTCAG GTTAATGCT TCCATGGATG TATGCTGTGT AATAGTGAA CTTACATATC CCTTAATACA  
 TCTGAATTAT TACATAAATC CTTAATATTA

SEQ ID NO:544: (Length of Sequence = 328 Nucleotides)

GGGAGACGAG AACTCTGAG ATCCGGGTC ACCTGTNAGT CGCTGGACCC AAGGGGAAG CGTCTTGATT CCTGGAGGAA  
 ATCTCCGAAG TGATGTGTAA CCCTGTGTGT CGCTGCACT TCGGCCGAA CTGCCCTTGG TTCAGTCCCC TGTTCCGTGA  
 GGAGGCGGG ATCATGTAAC AGTGGAGCAC ATCGTCCCG GCTTGGACGC CTTNACCTT TAAGTGTTC TGATTTAGTT  
 TGGCTTTGGG TCTACCAAGA ATTCTAGTCA GTTAAGTAC TTTTAAAGCC AGGTTCCTGA ATTTGGTAGG CATGGACACT  
 CCCAGTAG

SEQ ID NO:545: (Length of Sequence = 342 Nucleotides)

GGGCTATTAC CTCTGGGCAC TGGGAAACT GGGAGACGGG ACAAGGGGTG ACCAATTTTT CAGTGTATGC CCTTTTGGAA  
GTGTTAAACT TTTTTTTTTT TTTTTTGAGA CAGGNTCTCA CTCTGTGGC CTGCTGGAGT GCAATGGTGA GATCGTAACT  
CACTAAAGCC TCAACTTCCT CGGCTCAAGC AATCCTCTCA CCTCAGCCTC CTGAGAAGCT GGGACTACAA GTNTGTGCCA  
CCATACCTGG NTAAATNTTA AAGTTTTTGT AAAGATGGGG GTTTCCGAT GTTGCCCAAG CTAGTCTCAA ACTNCTGGGC  
TCAAGTGATT TGCCCACTT GG

SEQ ID NO:546: (Length of Sequence = 280 Nucleotides)

CTCGTAATGC CAGCATTTTG GGAGGCTTGA GGCGGGAGGN TCCCTTGAGC CGAGGAGTTC GAGATCAGCC TATGCAACAC  
AGTGAGACCC CTATNCTAT TINATTTAAA AAAAAAAAAA AAAGGGGTG ACGTTTACTG CCACCATCCC AGGCAGAAAG  
ATGAAGCCTA GAGCCTCTCA CTGCTTCTTA GTGGGTCTTG GGTGTAAAT TGCTGTCTTG GGTATATTT TTGGCAGAAA  
GCATCTGGCA TCAGGCACTG GTTCTCAAG TCGGGCCCC

SEQ ID NO:547: (Length of Sequence = 298 Nucleotides)

CTAAGAGTT TCACATAGTG GCTCAGTCCA GCCTTGTTGG GATCTTGCCG GGGCCTGGGG CCGGTGGTCC GGGGCCTAGG  
GGGATGCCIN ACCAACAGAG GCTCTNCAGG CTCTGAAGAT AAGCTGAGGG CAACAGTGA CAGAGGGGGC TGAACCTGCC  
TCAAGGAGGC TCTTATTCAA GAGCAAGTCT TGCTGGCTTC TCTGAGGCT GGGGACCAG TGSCCCTTTG GCCAGCCAGG  
ACCAGCAGCN CTNACCCT GCTGAGGGGC AGTTTGGGTC AGGGGGGNC CATAGAGG

SEQ ID NO:548: (Length of Sequence = 311 Nucleotides)

GAGACAGGGC TGTTTCTGC ACTACACTGG TCATCTGACC AACTTTCTGC AATGCTAAGA AGGTATTCTT TGACCAACA  
GCAGTCCACA TACAAGTTA AAAGGGGCC TGTTTATGTA GGAACAACAC TGAGGTGGTG CGTAGCAGGT ACAAGACGCC  
CAAATATTT CAGTTTATCT TACGGCTGA CTCTATTCT CCCACACTGT TTCCTAAGA AGGTCCACAT TATTTTGGNT  
ACTAGCCTAG TTAAAGTGA GATACTGTGG GCAACTTAA AGAAATGACA TCAGGCACAC AGGCTGAGCT T

SEQ ID NO:549: (Length of Sequence = 387 Nucleotides)

TTTATTTTGG TGTAAGACA GGAAGCTGA AAATACACTG TATTTAAAT TTNCTTGGTT CCCCCTCACA TTGTGGAAC  
CCCCCCCC CAGAGCTAAT CTGTTCAAAC TCAAATCTT AAAAATTACA GCAGCCAAAC AAAAGCATGG GGGAAAAAA  
AACAAAAACA AAAACCAGAT GGAGAAGTA GCCTGGGCA GTAGTGTAC TTGGTGTGA CGACTGAGGT GCTGAACAGG  
AGCTTCGTGTT TCTGTTTTT TCTTTCTTT CCTCCTTTCT CTTCAGAGAG GGGATCTNGA AGTAGCTGGG TGTGTCCAGT  
TTCATGAAGG CTGCTTCAAT AGCTTGGCTG AAGGAATTTT GAAACINGG CACAGGAACA CGGTTT

SEQ ID NO:550: (Length of Sequence = 377 Nucleotides)

CACCCCAAC TCTTCAACAA GTAGGGGCC TGGCTTGCAA TTGCAGAAGA GCTTTCCCAT CCTGGGTGA GCATACCTAC  
TGGTAGTGGC TCCGTGATTC CCTGGGAGG GGCTCCAGA GGTAACCAAC CAACCTGTG CTACTGCTAT GACCACAGTT  
CTGCTTCTGC TGCCCTCAA CTGGGGAAGA AACAAAGAGC CTGAGGGCTT TACTCAGCT TCTAGCACTA CGCAGTCACC  
ATATAAAGAG GAGCCAGTC TCTTCTCTT GTGAACCTT GACCCCAAC TCTTCAACAA GTGGGGCCCC CAGCTTGGG  
CAGCAGCACA GTGGCCCAA CCCCTAGGCT GAACATTCCA GTAGCAGCTG CTCGCG

SEQ ID NO:551: (Length of Sequence = 320 Nucleotides)

GAGTTTNTGG TGAGCCGAGA TCACGCCATT GCACTCCAGC CTGAGCAATC AGAACGGTCC GGCTCCTGTT GCTGAGGAAG  
CAGCTCTGGA TGACCTTCAT GATGAAATTT GCAGCCTCGC GCTCAGTCAT GTTGGGGCTA AACCTGTGCC TGGAGGAGAG

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GCTGTGTCTAG GGCTGCCATG GGCAGGGCCG TGCTGGCTCC CTGGCCCACT GGGAGGAGGG TCTTCCATGG GGACGGACTT  
CAGCTGAGAG CCATGCCCTG GGAAATGTAC CTTTGGGGTC CACATGTTGG AAGATGGGGT GCTGTGAAGG CCACACC

SEQ ID NO:552: (Length of Sequence = 334 Nucleotides)

ACAACTGAC AAGAGAAAAC AAAGAATTCT TTGGTGATCT GGACACGCTG ATGGGGCCTC TGACCCAGCA CAGCAGCATG  
ACCAATCTTG TCCGCTACGT TCGCAAGGA CTGNTTGGC TCGCATCGA TGCCCACTG TTGTAGTGGG TGTTCTCAGA  
TCTCTAGCAT CACGACCCAT CACTCTACCT CTACCAGCGC ACTGATGGTC ACTGGTGAA CTCCACTCAC TGGGGAACGT  
TCTCTTTGGT TATGTTTGT TTTATGCTTC TTTGTTATC TGTAAAAAC AGAAGTCATT GTAAGTTGAC ACTACAACIT  
AAGGGCAGTG TACG

SEQ ID NO:553: (Length of Sequence = 371 Nucleotides)

GAAAGGGGA AAAATCACAA TATGTGTTCT AGACAATATT GGTTTAGATT TTTTAAAGAT CTAAAATTCA ATTATGGAAA  
GCCAGCAGCC TGATCCAGTT ACTGTGACTA AAGCAATTGT CAGACCATCT CTAGTCAACC CCTTATGGGT TTTGCAATGT  
GTCTACCCCA ATTTTGGATC AGGAGGGGTC AAACAGAAAT ACAGCAATGT GATTAACTG CTCCTTTGCA AACAAATGA  
AAAGGTTTGT NCTTTCAAAG TAGATTCTAA CAAATCGTCT GCTCACTGTG GGGTAGCAA GNGAGAAAAG CAAATCTTTC  
TATTAGTCTC AAGCAAGTCT TCAGATTTAC ACACAATCTA ATGGAGGCAT C

SEQ ID NO:554: (Length of Sequence = 331 Nucleotides)

TTATGACTTT TTTCAATAAG GCTATTGTAT CAGCCTGINC TCTCGCTGCT AATAACGACA TACCCAAGAC TGGGTAAATTT  
ATAAAGGAAA GAGGTTTTAT GGAATCACAG TTCCACATGG CTGGGGAGGT CTCACAATCA TGGCGGAGG CAAAGGAGAA  
GCAGAGTCAC ATCTTACATG GCAGTAGGCA AGAAGAGCAT GTGCAGGGGA ACTCCCTTT ATAAAACCAT CAGATCTAGT  
GAGATTTATT CACTATCAAT GAGAGGCAGC ATGGGAAAAA CCTGCCCCCTC ATGATTCAT TACTTCCCAT TAGGTCCCTN  
CCACAATACA T

SEQ ID NO:555: (Length of Sequence = 305 Nucleotides)

GCTGGGACTA CAGGCGCCCG CCACCAGCC CGGCTAATTT TTGTATTTT TAGTAGAGAT GGGGTTTCAC CATGTTGGCC  
AGGATGGTCT CGATTTCCTG ACCTCATGAT CTGCCCCCT CGACCTCCA AAGTGCTGGG ATTACAGGCG TGAGCACCGC  
GCCAGCCCA ACACATGGTA TTTTCTGICA TTTTCATTTA GTCTTCTGGT TGCTGTGTA TGGTCTCAGG CTTTATTTAC  
ATTTCTCCGA TTACTAACAG ACTTGAACAT TTCAGCACAC TTTTAGGTT ATTGAATAAC CCTTA

SEQ ID NO:556: (Length of Sequence = 318 Nucleotides)

CTTTTTTGGT GATINCIAAG CTCGTGTTIN CTTATCCTAT ATATATATGT GGTGTTT NATTTTAGGA TTTTAAAGTT  
ATCCCTAATA AATTTTGAGA TGTGTTCCAT AGCTAGCCTG TTGAGATCTT TTATATCAA AAGTTAATAT CTGTGGATTT  
NTAATCAATC TTTCTACATA TTTAACAAAG TCATTAGCAA AATATTGAAC AAAACCTGTT ATTCATATCC TTAGATACAG  
AACATCAATA TCCTGAGATA CAGTACATCA TCAAAATGTG GTCCCCAAT GNGCAGCAAT TAGCATCATG TGGGAGCT

SEQ ID NO:557: (Length of Sequence = 349 Nucleotides)

GGAAGCAATG TGCTTCTTCT TAACAGAGAT ACTGCACTAT TCTCTATGTA TACTCACTG ATGGCATGGT ACATGTCTC  
CAGGATGTCT TGCTCAAAGT CCTTGCTCC ATTCACACCT TTCAGATTTT TGCGAACTC CTAGAGACAG GCCAGTAAGT  
TTTTTCCCT TGTTCAACA CTGAAGCCCC ACCTAAGGAA CTCTGGGTT TTCAGTAAAT AGGACTTAGG AAAAGGTAAG  
CGAAAAAACC CACTTCCCCA CCCAGTCCC TTTTCTAGGT TTGGGCCAGC CCTTCTTGA TTCCCTTGA CAGAACCCCA  
TCCATCATGC CCACTGGAAT CCTATGTCC

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SEQ ID NO:558: (Length of Sequence = 279 Nucleotides)

GGGCCAGGCG CTGTGGCTCA CGCTGTAAT CCTAGCACTT TGGGAGGCCA AGGTGGGCAG ATCACTGAG ATCAGGAGTT  
CAAGACCAGC CTGGCCATGT TGAAACCCCA TCTTTACTTG TAATACAAA ATTAGCTGGG CGTGGTGGTG TCGCCTATA  
ATCCACGCTG CTGGGGAGGC TGAGACAGGA GAACCTCTTG AACCCGGGAG GCAGAGGTN CAGTGAGCCA AGACTGCACC  
ACTGCATTCC AGCCTGGGCG ACAGAGTGAA ACTGTGTCT

SEQ ID NO:559: (Length of Sequence = 278 Nucleotides)

GAGAAAGCCA AGAGCCATCT GGAGGTGCGG CTGGAGGAGA ACGTGAACCG CCGCTGCTG GAGGAGGGCA GCGTGGAGGC  
GCGCACCATC GAGGACGCCA TTGCACTGCT CAGCGTGGCG GAGGAGGCGG CCGACCGCA CCCAGAAAGA CGCATGCGGG  
CAGCCTTCAC AGCCTTTTAC GAAGCCAGC TGCCGCGGCT CAAACAAGAG AACCCCAACA TGCGGCTNTC GCAGCTGAAA  
CAGCTCTTCA AGAAGGAGTG GCTCCGCTCT CCTGACAA

SEQ ID NO:560: (Length of Sequence = 304 Nucleotides)

CAATGTTAT TGAAGTTAT CTAGAAGGCT CAGTAACCAG AACTTCCTTT CATTCGTCTT TTCTTTTCT TTTTTTTTT  
CTCTGAGAC AGTCTGGCTC TGTCCTCCAG GCTGGAGTGC AATGGTGTA TCTCAGCTCA TTGCAACCTC TGCTGCCGG  
GTCTGTGCAA TTCTCTGCC TCAGCCTCCC GAGTAGCGGG ATTACAGGCA CGTGCCACCA CACCTGGCTA ATTTTTTTTT  
TTTTTTTTTT TTGTATTTT AGTAGAGCG GGGTTTTCAC CATGTTGGCC AGGCTAGTTT CAAA

SEQ ID NO:561: (Length of Sequence = 323 Nucleotides)

GATGGTAAAC ATAAACCAA ATATATCTGT AATTACATTA AGTGCAAGTG AACCAAAACA GTTCAGATAA AAGACAGTAC  
CTATTCATA GCATTATGAC TATCATGAGG TAATATATGT AGAGATTAGA GTACACATGT CATATTAGGA GGTGTGCAAT  
AAATGATACT TTATCTGAA GATTAACATA ATTCATACTT AAAAGGATCA AGAACTAGAA TATTAAAAA NTAGAATGTG  
AATGTTCTG CAAGTTTGA TAAGAACAAG CCCATAAATT AATCTCTAAT TTGCTACATT TAGGGAATAT GGGTAATGAC  
TAC

SEQ ID NO:562: (Length of Sequence = 214 Nucleotides)

TCTAATNAGG CCCTGCGTGC TGTGTCATCC CATGGCGGAA GAAGGAAGGG CAAGAGTGGG TGAGATTGIN AGCAGGAG  
AAGGCTGAAC TTCATATTTT AACACCCAC TTTCATGATT ATNATAATCT TCGCATTTAT TTTTTTGGT CTCTTCATGT  
NCCTAACTT TTCTCTGGG TTTTGGTCTT TTGCTCTTC ATTTTAGAA GCTC

SEQ ID NO:563: (Length of Sequence = 358 Nucleotides)

TTTTTTTTGT GAGAAACAGA AGCTGAATAT CTGATTTGA TTGCCACAC AGGCGTTCAA TGGCTTAGCA GTGCTAAAGA  
TTTATTTTTA TTTTTTTGGG CTCTGGGCTG ACATTGGAAA TTCTNCTGAA TGAGAAAAAC CATCTCAAC CACTGTTTTT  
TAACACTGAG TAACTTTGGA AATTAACTTT TGCCACAGAC TTGAAAATGT TTCTTAATGA ATTTGACCTG AAATTACAAG  
GTACAACAAC ATAATATGCT AAATTCATTT CAATAAAAAC TAAACTTTAA GATTGTCAAG CTGCTTTATA TACTTCTGT  
GCTATGAGAA GTCAAAACAG CGCTGTATTG CCAAATCC

SEQ ID NO:564: (Length of Sequence = 405 Nucleotides)

ATGTACTGTG TGTTCATAC ACATGTTTCC TTTAGTCTTA AATCTGGCT CATGGGGTAA ACACTATTAT AATCTCCATC  
CTCCAGATGA GGAAAGTGAG ACTTAGAGGT TAAGTACATT TTAGGATAAA GTAGGGTATT TCGATAAATG TTTCAAATGT  
GTTTCTGGTC TCTGAGSACT AACTCCAG GCTGCTGGGG ATACAAAATA CCTTTCTTT ACCATAGGAG CACTTGGGTA  
GAATATTTGC AGAAACAATA AACTGGCTGA TATTTAAAGT TCTCTTCAGC TCTGACATTC TATAATTTCA TTGACCTCT

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TTGCATTAA TTATGTGAT TTCTTTCT ACCCTTGCT TAGCTAAAA TATACCCCTT CINTGTCCAT GGACAGGAGG  
ATGGG

SEQ ID NO:565: (Length of Sequence = 196 Nucleotides)

CATCCACATC AGGCAAAGGC AAAGCAGGAC CTGAACCTCC CACCCCAAGC CCTACATCCA TGCAAGCCAG ACCAGACTGG  
GTCAGAGGCT AGAAGGGNGC TCACAGGNTT GCCTGGGGAA GCCTCGGCC AAAACCTGGC CCTNGCTCCA GCCCAGAGNA  
CCCACCTGGG CATNAGACTT GCGGCAGCGT AGGGGT

SEQ ID NO:566: (Length of Sequence = 275 Nucleotides)

TTGGAAAAA GAGAAAAA AATTCTGCTT CATTTACGAA TGTTGCCAA GGAGGCAAGT TTTCAACTGA AAACAAAACA  
TAAAGGTCTA TGTTGATGCA GCCAAATGTT TCTCCATTTA GAAAATCATC ATAAAAGGTG GCAGCACTTT TTTTGCTTGT  
TAACTATATT ACTTATAACT GGCTGCACCA ACATTTTCATC TCAATTTTIG GAGTGTCTTCT TCTGATCAAT CCTAAAAGCA  
ACACAATCAT TTTAGAGGTT GCAGACTACA ACAGC

SEQ ID NO:567: (Length of Sequence = 349 Nucleotides)

CGCTCGTNG TCCCACACAA ATGTTTAAGA AGTCACTGCA ATGTACTCCC CGCTCTGAT GAAAAGAAGC CCCTGGCACA  
AAAGATTCCA GTGCCCCGTA AGAGGCTCCC TTCTCTCTGT GGGCTCTCTT AGAAAACCAG CGGGACGGCC TCCCTGCTGA  
TACCGTCTAT AACCTTAGGG GGNCTCGGG CAGGCAACT CATCTCGGTG ATGGCTGTAG ATGCTAACAC TGGCCAATTC  
AATGCCACAC CTAATGGTTA CCCTTGAGG GCATTTCTCC AGACAGAAGC CCCTTGAAGC CTAGGTAGGG CAGGATCAGA  
GATACAACCC GTGTTTGTCT CGAAGGGCT

SEQ ID NO:568: (Length of Sequence = 368 Nucleotides)

CTGGTAACTT CCGATTGNN TTCCCGGCC TCANCCCTTT CCCAGGGCTA TTCTCTCCC ACCTGCTGCC AGGCCTTTCC  
CTGGCCATCC TGTGTTAAAT GTCATCCGC CCTACTGTT ATGTTCTCCA CAGCACTTGA ACAAGACCCA ACATGCCCTT  
TCACITCAAG GTTTATCTT CTATTAGTTT TCCAGAGTC TGCTTCCCTA GTGTCCATCT CCCCTGCTCG AATGCCCTT  
GAGAGCCAGT GCTTGTTATT TGGTCTNGT GGTATGGGC TGGCAGATAG TAGGCAGTCA GCAGATATT ATGGAACAAA  
CAATGAATT TGTGTACTA TAGTTCATTG TTCATAGTTC ATTCATAG

SEQ ID NO:569: (Length of Sequence = 328 Nucleotides)

TGTCACITAA TGCACAGCTG GGGCTCAGGA CACAGCTTTG CACACCCTAA GINTCAATA AATGCTAGCT CAGGGCAGAG  
CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATACCCTAA GTACTCAATA AATGCTAGCT  
CAGGGCAGAG CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATACCCTAA GTGCTCAATA  
AATGCTAGCT CAGGGCAGAG CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGNG ACAGAGCTTT GCATACCCTA  
AGGTGCTC

SEQ ID NO:570: (Length of Sequence = 313 Nucleotides)

CCCTAAAAGG CAGAGTGTCT TCTTACCTCC ACACAACCAC GCTAGCTCTA TAGCAGTGGT TCTTAACCAG ATTGAAATGG  
CTGAAATGAC AGACATATAT TTCAGAACCT GGATGGGAAG AAAGCTCAAT GAGATAGAGG AGAAGGTGA AACGCATCCA  
AGTAAAGCAG TAAAATGATC CAAGAGTTGA AAGATGACTT AGCCATTTTA AGAAAGAACC AAACAGAACT TCTGGAATA  
AAAAAAATC ACTACAGGAA TTCATAATG CAATTGGAAG CATAAATAAC AAAATAAACC AATCTGAGGG AAA

SEQ ID NO:571: (Length of Sequence = 338 Nucleotides)

AGGAAAGCAG GGTCTCAAT TCTGTACGAA AGAGGAGGCT GTTTTACTTC CTGGAATTAT AGAGGCCAGA GGTGTCTCTT  
TTTCAATTTA TTGGGAAGGT TTATTTTAAT ATGGACTTAG AAATAAATAA CTTATTAAAG TGAAGGTTCA CTTGGAGCCT  
TAGGCTG3CT GCTAAGTGTG ASTCTGGGCT GTTGAAGGGA CTGINTCTGT CTNCTGGGTC TCTGTAGGAG TTTGAAGGAG  
AAGACTG3CC CCAAAGGGTG TTTGAACAGG TTAGATGTGC CCATTGGTTA GAACCTACTT GGATAGGGAG AAGGNTCTA  
GGCGTATCC ACAACTT

SEO ID NO:572: (Length of Sequence = 375 Nucleotides)

CTATTTCCAG AAGTGACAGC ACAAGTCTGA GTTGTCTGTT GGCTGGTGA CCTCAGACAC ACTAATTGA ATTGAAAGCT  
AAGAGTAAAA ATTINCTGGT TACAGGCGAG TCATACTCTT GCAAGTAGTT AGCAAAGGGA GGCCCAAATT CTCAAGTTG  
TTGATGGGA ACTTGCCACT AAGAGAAGGC AGAGAGGTCC CTAGTGGGTA TATTINCTGC CRAAGCCATT GCCAAAGAAG  
AGGAACCACA GAAAGAGAGA CATCATGACC NGGAGAAAAA TGTGACTAGA CATGCTAACC TCCAGGTTT TATATATGAC  
TTGAGTCTGC TGTAAATTGGC AGCAGAAATC CAAATTGTGT ATGGGTAGAC CACAA

SEO ID NO:573: (Length of Sequence = 396 Nucleotides)

GAATCCCCAA AGGAGAGGAG CTAACCTATG ACTATCAGTT TGATTTTINAG GACGATCAGC ACAAGATCCC CTGCCACTGT  
GGAGCCTGGA ATTGTGGGAA ATGGATGAAC TAAGAAGCTT TGAGGCTACC AGGCAGGGGA GTCCCCCTAC CCACAANTC  
TTCCCTGAAA GNAATNGAGG GGAAGAGAG GTAGCAGCCA GAGCCAGGAC CCAGG3TTGG GGCTGCCGCG TGACCCGAG  
CCCTGGAGC AGGAGGCTGG GGCAGAGGGC CTTAGGCCAA GCCACCTTG GGCACAGGG ACAATCTCTT TCCCCACCAC  
CGCCCTCAG GCTGGCATCT CTGCCCCAG CTTCCAGGAG GGGCCAGACA GAAGCAGCCA TTTGGCATCT CAGTT

SEO ID NO:574: (Length of Sequence = 373 Nucleotides)

CTAAACAGAT TTAATCCCT CCCAGCAATC CAGATTAAAT TAATATGCTT TCTTAACGGC ATTCCGCAIT TINTATTAA  
GCAATGAAC GTCCATCCCT CTCTGATAAA TTAGG3CAA AAAATTCATA TGTTTAGGGC ATAGGGAAGG AGGAGTTGT  
GGCTGTTAA AAAAAGAACA AAAAAAGTA CCGCAATGG CGTTTCAAAG TCTAGACATC TTCATCATCA ACACAAACAT  
TCCTCTTAC AAAGGGACCT CAAGTAACCT TAGGCTGGAG GACCCACCTG CGTATGTTT TINTCTCAT TTTCTTTAC  
CTTCCCTCA GGCCACCCAA CCCACATCA GTGGCCCAAG TCAGTGGGG TTT

SEO ID NO:575: (Length of Sequence = 431 Nucleotides)

GCCCCATTA CTTCTTTTGC TGCTACCACA ACAAGGTATA TTAGCCCTTG AAATTAAAGA TGTGTCTGTC CCAGTGTGTC  
TGTCTTCAC CTAAATGCAT ACAGTCATAT TCCAAAGAC TATATATTAG TGATATCTAT ATAGTTCACC CTTATATAC  
ATGAGCTCCC GTGTGTGGAG TGAATAATT GCAGATATAA AATATTGGG AAAAAATTC ATGTGTACTG AACATGTATA  
GACTTTTTTN CTGTATATCA TTTCTTAAAT AATACAGAAT AATAACCACT GTTACATAG CATTACATT GTGTAGGTA  
TTATAAATAA TCTGTACATA ATTAAACIG TACAGGAGAA TATGGCATAA GNCATATGTG GATACCACAC CATTTTATAT  
CAAGTACTTG AGGCCTCTGC AGATTGTGTT G

SEO ID NO:576: (Length of Sequence = 410 Nucleotides)

GATGCAAACA GCCCCAAGGA GGGAGGTGGA AAGGCCAAGG GGCTTGCCCT CCTGCAAGCG CGCCTGTAAA CAAGTCCCCG  
TGGGTTTGT GGAGGTGCGC CCACATCTAA GACTGTGCGC CCTGCACTCC CTCTGGATGG CTGCCGAAT TTGGTCTTCG  
CTGATCACC AATCTGGAAG GGTGGAGAGA CAGTGGCTG GACAGCTGCC TGATTGGCC ATGACCCCTC ACGGGTGTCT  
GTGGGCAAC ACCAAACGCC AGCCTGCTCT GCTGGCAGG CTTCTACCTG CACAGTCCCT AGGGCTGCAA GAGCAAATGG  
GGACCCCTGC TNCGGTCTCT TNCAGGGCC TTGGTCAATG ACATACCAC TTTCTTAGGA CAGCGTCTTG GGGAGCTACC  
GGAACCTTCG



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SEQ ID NO:577: (Length of Sequence = 405 Nucleotides)

GAATGAAAAT GGCATATTTG AACATAAACT TAGGGCAGAT TTTTACTACT TTTGAAAAAA TGTGGGAAAA TATTTCTGTA  
 TGAAACGTAA AACAACTTTT AATTTTTTTT AGAAGTTGAG AGGATTCTAT TTTGCAAAGC TGTATTATGA AGCTAAAGAA  
 TATGATCTTG CTAAAAAGTA AGTACAACT GTAACATGTA TTCTTTTTTT AAAATCAATG CCTTINCTCA TTINCTTCTT  
 TGAAATAGGT AAAAATATGT CCTTAGTAGT TCTTCTAAG TGTATTCTGG AATAAGGGAT TTATCACTCA GACTGATGCT  
 AAGGACCAGC CTAGATTCCA TTGAGATTGA AACCGTAATT AGTGTITTTCT GCATGCTGCT GCTTTATACC AAGGGCAAGA  
 AATTG

SEQ ID NO:578: (Length of Sequence = 406 Nucleotides)

CGCTACAGGG GGGGCTGAG GCACTGCAGA AAGTGGGCTT GAGCCTCGAG GATGACGGTG CTGCAGGAAC CCGTCCAGGC  
 TGCATATATG CAAGCACTAA ACCACTATGC TTACCGAGAT GCGGTTTTCC TCGCAGAACG CCTTTATGCA GAAGTACACT  
 CAGAAGAAGC CTGTTTTTTA CTGGCAACCT GTTATTACCG CTCAGGAAAG GCATATAAAG CATATAGACT CTTGAAAGGA  
 CACAGTTGTA CTACACCGCA ATGCAAATAC CTGCTTGCAA AATGTTGTGT TGATCTCAGC AAGCTTCAG AAGGGGAACA  
 AATCTTATCT GGTGGAGTGT TTAATAAGCA GAAAAGCCAT GATGATATTG TTACTGAGTT TGGTGATTCA GCTTGCTTTA  
 CTCCTT

SEQ ID NO:579: (Length of Sequence = 374 Nucleotides)

GTGGGCTGCT TCTGGAGTCC ACATTGCTAA ATATTATGCT GCAGTAAATA TTAATCTTGA GAACTAGGTG ATATGGTTTG  
 GCTGTGGCCC ACTCAAATCT CATCTTGAAT TGTAGTTCCC ATAATCCCCA CATATCATGG GAGTAACCTG ATGGGAGGAA  
 ACTGAATCAT AGGGCAGTTA TTTCTATGCT GTCCCTATAA TAGTGAGTTT TCACATATATC TGCTGGTTTT ATAAGGGGCT  
 TCCCCCCCTN CCTTGTCTCT GCATTTCTCT TTCCGGCCAT TATGAGAGGA AGGACATGTT TGCTTCCOCT TCTGCCATGA  
 TTGTAAGTTT CCTGAGGCCT CTGAGCCAT GCTGAACTGT GGAATTTAAT TAAA

SEQ ID NO:580: (Length of Sequence = 396 Nucleotides)

CAGAATAAAC ATTTACTATT AGGAGAGTCA AATCATTTAT TTTACATGA AAGAGATTAA GTAAAGCAGA ATCTTTGATG  
 GTCTGCTGTG AATTCTTCGC AGTGATTGAG AAATTTCGA AAACCACTTC CAAATCAATT ATAATATTAA GTAAACTTTG  
 GCTTTAGGAG TAAGAGAGAG AAGGTCGCG TCCATGTGG GAAAGAATAG ATATGCCAC AATAATTAGT CTATTACTTG  
 TTGAAAAGG GTGATTTCTT CGTCATTCA AAGTATTAAG CAAATAAGGA CATATTGAGT ATGTAATTCA TGGAAAANTA  
 AGNAACTTCT TACAGTATGA TTCCTAAAGG ATTATGGATG CCATTATCCA TTTTGAGATT GGTATTGAAG CTTATC

SEQ ID NO:581: (Length of Sequence = 449 Nucleotides)

CTGCTCCGTG GCTGTTTCAA AGACTGGGCG AAAGGCTGTC CGGAGGGCAG ACCAGGTGCC TTGCCGCAGA GAAAACACCA  
 NAGTCTCCTG TTCGCTCATA AAGAAGTTTT TGGGATGGGA GAGAATCCAG ACCATCTTGG GGCAGCCANG CCGTGCCTT  
 CATTTTTACA GAGGTAGCAC AATTGATTCC AACACAAAAC TCCTTCCOCT TTTTAAAATG ATTTCTGTTT TAATGCCATA  
 GATCAAAGGC CTCAGAAACC ATTGTGTGTT TCCTCTTTGA AGCAATGACA AGCACTTTAC TTTACGGTG GTTTTTGTTT  
 TTINCTTATG CTGTGGAACC TCTTTTGGAG GACGTTAAAG GCGTGTTTTA CTGTTTTTTT TAAGAGTGTG TGATGTGTGT  
 TTGTAGGAT TCTTGACAGT GCTGTAATAC AGACGGCAAT GCAATAGCC

SEQ ID NO:582: (Length of Sequence = 261 Nucleotides)

CCAGCAGGTG GTACTTGACG TGGCAGGGTC CCGGACAGGG CCGGTCAGT GTGCTGAGCT TGGTGGCGGG CACTGGCTTG  
 GACAGTGGCA TGACCGGAGG GAAGTGGCGG CCGGAGGGCC TCAGGGGGCT GAGCACGTCC TTGCAGAGGG GCGGGAACGG

GTNCTGCTGG TASTGGCCAA ANACCTCGAA AACAATGGGC TNGCTCTTGA TGTACAGGTG GCGTTTATTT TCATGGATT  
ATACACACTG GAAAAGCCTC T

SEQ ID NO:583: (Length of Sequence = 399 Nucleotides)

CCCAGGCCAC CATTTAAAGC AGCCATTCTT GCCAAGAGC CAACATTGAG GCCAGCCGTT GCTCCAGCTA ATGTCTGCAG  
GGCTCCAAGT GAGGCTATGG GGTGACAGA ATTACTGCTG CTAGAGCTAG GTGAGGACCC TGAAGTAGTG AGCAGCTGA  
GGGACTGCT GGATGTAGTG AGAGCATTGG TACCACTTGG TGTGTTCTGA NNTGCACTAG CTGCAGCAGC TAGTGCAGCN  
AAATTCTGTA ACTGCATTGC ATTCAACCTT CCCATTGGGT GGAGGCTGCT CAGGCTGTTG AGGTTCCAG AGGAGGCAGT  
CTGCTGAAGG AGTGCTAAAT ACTNGGTCC AAGAGTATTT AGACCAGCA GGTTCCTCCA CACAGATGCT GCGCTGATT

SEQ ID NO:584: (Length of Sequence = 441 Nucleotides)

GTGTTTTTA AGGATTAAAT GAGATATTAC ATGTAATGTG CTCATCCAG TGCCAGCAC ACAAGAAATG TTCAATAAAA  
TAGGAGGCAT AATTGTCCTG TTGTAATACT AGATAACCTT TTAAATGGAT ATTCTACAAT TATGAATCTA AGGTGCTTGG  
GAGGAGCCTA GGCAATCTAT TCCAAAATTA AATGTAAGGA AGGTACATGA GTAAGGATG GAGTAGGCC TGGACCAACA  
CTAGAGCTCC AAATTTCCTA AAAAGCTTGA GCTTCTTTTA CTGTGGCCAC GCCTATAATG GGAATAAATC TGGTCTCTCA  
AACAGTCCCT CCCCTCTCTA AGCTCTGCTG GGGAGTAGAG ACATCAGCAG GCTGCTCTG TGNITAGCTC CTCCCCATCT  
TNGACTCTCA TCCCATTCCT TCTTCTCTAC TACCCATTCA G

SEQ ID NO:585: (Length of Sequence = 326 Nucleotides)

GAAATGCAGG TTCAGCTATT TNGTCTTGC AGAGTCCAGT TAACAAAAGT GAGTNGTGT ATAAAGAAAG TNATTTTTTT  
TTTTTAAAT ATTCCAAAGC TAGCTGAGGG GAACAAGTAC AGGCTTCTG CCTAGGGTA TCACTTTGCT TTGGAGCAG  
GAAGTAAGCA CTTTTAAAGG GGGCTTAACA TGAATGGCAC ATGGGGTCGG GGGAGTAAG CAAGTGCAGC ATCTACATGT  
TAGTTTGGTA CCTATCTAC TAGGTAGTCA AGGTGGTGC TGCTGTNTC TTGTGGGGC ATGTGTACTT TGGGGTGTGA  
AATTGG

SEQ ID NO:586: (Length of Sequence = 431 Nucleotides)

GAACGAAGGA AAAGCATCAA AACCTACAGA GAAATINTTC AAGAAAAAGA GCGGAGAGAG AGAGAGCTGC ATGAAGCATA  
TAAGANCGCT CGGTCCAGG AGGAGGCAGA GGGGATCCTT CAACAGTACA TTGAGAGGTT CACCATCAGT GAGGCTGTTT  
TCGAACGCTT GGAGATGCCA AAAATTCTGG AAAGAAGCCA TTCAACAGAG CCAAAATTAT CCTCCTTCCT GAATGACCCC  
AATCCCATGA AATACCTGCG GCAACAGTCA CTGCTCCAC CCAAATTCAC TGCCACTGTT GAAACCACCA TTGCTGTGC  
CAGTNTCTG GGATACCAGC ATGTCAAGCA GGCAAGTGGG GTCTNCAAGC AAAACTGTG ACTTCCCAA AGCAAGTGCC  
TATGCTTGAC ANCCAGGC TTAATTCCA G

SEQ ID NO:587: (Length of Sequence = 338 Nucleotides)

CTCAAGCAAT TCTCCACCT CAGCTCCCA AATAGCTGGG ATCACTGGCA CAAACCACCA TGCCAGCTA ATTTGTATT  
TTTGTAGAG ACAGGTTTC ACCATGTCG CAGGCTGCT CTCAACCTCC TGGGCTCAAG CAATCCTCCT GCTCGGCT  
CCCAAGTGC TGGGATTACA GATGTAGCC ACCGATCCA GCCCCACACC CTCATTATA CCAATTACCT GCCAGTAAC  
TGTGACTTT TGCTTCTCA CCCCTGCTCT GATCTGGAAG GAGAGGGATT ATGTTATAGC TTGTCAGCAC AGTCCCAAAG  
TTCAATATTT CTGCGGGC

SEQ ID NO:588: (Length of Sequence = 277 Nucleotides)

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AAGAACATTT AAGTAGTTCA TACAAAGAAA TATAAATTGT NCTTAAATAT ATCAAAATAT ACTCACCTCA TTCATAGTAA  
 AAGAAATAAA AAACGTGCT CTGATGACAT TTTTCATCTA TGAGATTTAC AAAGNTCTAA AAATTGAGAA TATACATTTT  
 CTATTGCCCTT TGGATGGCAA TTGGGCAGTA ACTATCAAAA GTATAAATAT CTATACCCCTT TGAGGTGTCA ATCTCATTTT  
 AAAGAATTTA TTCTTCAGCT ATGTACATAC ATGTAGG

SEQ ID NO:589: (Length of Sequence = 353 Nucleotides)

GTAATGAATT ATAAGAATCT GAATTGAGAG CTAATAATATC TGGGTGTGAG GCCTACTCTG CCACGNTTTT NTTATTGCA  
 AATATTAGAG CTGAAGTACA TGACCTCAAA GGCTCTAACC AACTCCAAA CCTACAATTC AATGGCTGAC TGATATACAT  
 TGTATACTCT TTAATAACAA TTAATAACAA AGANGNTAAT AAATGTGTCA TGTATTATAC AACTATTATA CAGGTGTGTG  
 TGTATATATA TATAATNININ CACAGAGAGG AAAGACATCT ATACATAGNC ATAACCATCA AATCAGTCAG AATTTCATC  
 AGACACTTIN CATTTCCAG GTCCATCAGA TGG

SEQ ID NO:590: (Length of Sequence = 364 Nucleotides)

CTCATATACA TAAAAAGTGA TAAGAATCCG AAAAGACAGC CAGGGGAATT AAATGCCAGT TGGGGCCAAC GGGGCCCTGA  
 TCACGGAAGA GGGCGCCCC AGCTCTCAAT CTTACACAA TCCTGCACC CAGGGTCACA GAGCATGCGC AGGTCCCTCC  
 CGCCCACTTC CGGGGCAACT GCCAACCACC GCGCAGGCTG AGCCCCAGGC AGGAAGCAGC CCACTTGGTG GGGTTGGGGT  
 ATGAGTCCTT CCTCGCGGG GCTCGGTGGG TCTGAGTAT TCTTTGGCCG GATTINCTGA TCCGTCTGCT CCAGGTGAGC  
 TNGGGAAGGC CCCAGGAAA GGGCCANAAG GGCCTTTGCC AGGG

SEQ ID NO:591: (Length of Sequence = 311 Nucleotides)

GAAAGGGGAA TAGGGAGTGA ACGTTTAATC AATAGAGTTT GGAAGATGA AAACGTCTA GAGATGAGTG GTGGTGATGC  
 CACATAACAA TGTGAGGTA CTTAATACCA CTGAAGTGA TGTTTAAAT GGCAAAAGG GTAAATTGA TGTATGTAT  
 ATTTTACCAG AATTTTTTTT TTAAGCTTA CTGCATGGG ACCAAGCGTG GTGGCTACA CCTGTATCC CAGCACTTG  
 GGAGGCCNAG GCGGTGGGT CACTGAGGT CAGGAGTTCG AGACCAGCCT AGCCAACATG TTGAACCCC G

SEQ ID NO:592: (Length of Sequence = 358 Nucleotides)

ATTTTGGTTT CTACCCATCA TCCTCTCTC AAAGGAACCA GGGTCTCTG GGGATTGGC TGATGCCAGG GGATGGAGAG  
 TGTCAATGG NTCTGAAGG GAGGCTGCA GCATGTGTGT GGCAGGTCAG ACAGACCCAA GAGCCAGCTT GGTGGGGCAT  
 CCTTGGCTAC CCTGGGACA CAGTGAGCGC CGAATAAAT AACATCAGGA ATGENTACA ACGCAATGAG TAAGGGGAAT  
 CTGAGTCTAT AGGGATACAG ACCCAGAGGT AAATNGCCAT GGCCACCAC TTCTCTACAG GAGAATGTGA CTAGTTGAGC  
 GTAGGAACAT GGAACAAAT GTAGAGGTG GCTGACAT

SEQ ID NO:593: (Length of Sequence = 354 Nucleotides)

GACAGACTGA AGGAATATAT GCAGCTAAT TTAACATTTT TTGAAATTTT ATATTGCAGA AGTTGTACAT ATTNCTGTT  
 GTGAAATTAG AAAGANTGA CAGGCAAGGA GGGTGGTCTA CAAAGCACTC CATAGATCCA CCATACTGAG ACAATGCTTA  
 ATGCTTTGAT GAATTTATTT ATTINATACT TTCTATGCAT ATGCATGTAT TGTATAAATA CGNATGCATG GTTAAATAGA  
 AATGGTTCTC CTGGGTGTTG TGTATATCCA TTTATTGTTG TGAAGTAAAT CCCCAAGAG GTAGGTTTGC TTTTGCTGA  
 GGAGTCTTTT GCTACATACT GGCTGTACAT AATG

SEQ ID NO:594: (Length of Sequence = 319 Nucleotides)

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GAACATGGCC GTGAAC TGCT CGGAGATGCG CTGGAACAGC TCCTGGATGG CCGTGCTGTT CCGATGAAG GTGGAGGACA  
 TCTTGAGGCC GCGGGGCGGG ATGTACACA CGGCCACCTT CAGTTGTGTG GGGATCCACT CCACGAAGTA GCTGCTGTTT  
 TTGCTCTGGA TGGCCAGCAT CTGCTCGTCC ACCTCCTTCA TGGACATGCG GCGCCGGAAC ACGGTGGCCA CCGTCAAGTA  
 GCGGCCGTGG CCGGGGTGCG AGGCGGCCAT CATGTTCTTG GCATCGAACA TCTGCTTGGG TGAGCTCGGG CACGGTCAA

SEQ ID NO:595: (Length of Sequence = 370 Nucleotides)

GAAGAATANA AAGAAAAATC CAAAATGAAG AGTATTATAC AAGACAATA GTCAATAGTC TTCAAAGTGT CAAGGTCATG  
 AAAAATTGAG GAAGCATCCC AGACTGAAGG GGAATAAGA AAAGTGACAA CTAAATGTAA TGGGTGATTC TGSATTAGAT  
 CCTGGAATTG AAAAAGAACA TTCATGGAAC AACTGACAAA TTTGAATAAG GTCTGTAGAT CAGTAACAGT ATTGCATCAG  
 TGTTAATCTC CTGGTTTAGA TCATGCTTA ATGGAATGT TTTGTACTAT TTTTGTGGA CTCTTAAGGA ATGTGGGTGG  
 AGGACACGGA TGAGACCTAC TTGCATCGAC AACAGGCGT TCTACGGACA

SEQ ID NO:596: (Length of Sequence = 335 Nucleotides)

CCACAGAGCC CCAACTCCCC CCACAGGAGC CAGCTCCCC TOGAAGGCCT G3AGCAGCGG GCGTGTGACA CCTGAAGCCG  
 CCAGCTCGCC ACAGGGGCCA GGGAGCTGGA GATGGCTCC AGCGTCAGTG CCAAGACTGA GCGGGCCCTC CAGTGTGTGTC  
 CAAGGAAATG TAGAATCACT TTGTAGATAT GGAGATGAAG AAGACAAATC TTTATTATAA TATTGATCAG TTTTATGCCG  
 CATGTTCGT GGCAGTAGAC CACATCTGTT CGTCTGCACA GCTGTGAGGC GATGCTGTTT CATCTGCACA TGAAGGACCC  
 CCCATACAAG CCTGT

SEQ ID NO:597: (Length of Sequence = 336 Nucleotides)

CTCCTGAACA TCACAACTT GGTTCCTACC TACCACACGA GTAGCCAAA GAAAAGAAGC ACTAATAGAG AAAGGGGTGT  
 CTCACACCAG ACAGAGGACC TCTGCTGTCA ATTAGATCCA GTATCATGAC CTAACCTTAA GTGTGGAAAA GAGTTCAGAT  
 CTCTGAGACA CTGTGAAGAA ATGGATGGCT CATGTAACAT CTCTGATCCC TCAGTCCCCA ACCCTGGAGC TGTTCATTT  
 ACAACATTCA TAGGAGTTAA CTTAGCAGTG TTGCAAGTTA AGGTTCNAAA CCAAATTATT TAATCAGTGT CCCCCAATA  
 AAATCACTTA TCCCATTTTA TTGCTAGTTT AGTTTT

SEQ ID NO:598: (Length of Sequence = 402 Nucleotides)

ACCACTACAC AATATATCTA TGTAACAAA CTGCATTCCT ACCCCTTAAA TTCATACAAA TAAAAAAAT TAAAAATAA  
 ATAAAGTAGG ACAATCCCC AGATAAATAA ATTAATAAAT AAATAAATAA ATAAATAAAT AAATAACTTT AGCTCTTGCC  
 TTCTCCTACA CATAAGTTAA TGCTGATGG GGTAGTGGT TATGCTTCTG TAACTATAA TCAGATGTAC TCTTGACCCC  
 AAACCTAGAT GCGATTTTNC GTATACTGGA ATCTTTGCTA CCTGTATATA AACTGTGGAA CTGAAAATGC TGCATTGGGA  
 GCGATCTGAT AGGNTCTGTC CTAAAGGGCT ACTCTGAGGG GCTCTAGGG CTTCAGTCTA CAGGCCCCA GGGAGGACTG  
 CT

SEQ ID NO:599: (Length of Sequence = 369 Nucleotides)

CTCAACAAAG TTTGGATTTT NTCCAGATG ACTCCTTGGG TGAATTTTAA ATCAAGTTAT TTCAACCATT TTNCTCATAT  
 ATTTGCTGCA TCCCTATTCT GTTATTCAGT GAATACATGG GAGAGGTATG TNATTCTCAG CTCCCACAGC CCATAAGTCG  
 GGGAAACCAG ACTTCATTCC CCTCTGCTCT AACTCAGACT GTGAGGTCAT TGAGGSCAAG ACTGATGAAT TGTTCCTCTT  
 CCTATCACTG GTGCCAAGCA CAGTAGTTGG CATAAGAAG TTACTCAATA AAGAGGGGGT GAATTTAATG AAAGACAGAG  
 GAAGNGGGA CCTGGGGGAA GAGGTGGCA TAAAGTGAAG GTACAAACA

SEQ ID NO:600: (Length of Sequence = 342 Nucleotides)

207

CCGCTCCTG GGTTCAGCA ATTCTCCTGC CTCAGCCTCC CGAGTAGCTG GGACTACAGG CGTGGCTCC ACCACCAGC  
 CCGCTAATT TTGTATTTT NAGTAAAGAT GGGTTTCTC CATGTTGGCC AGGCTGGTCT TGAAGTCTG ACCTCAGGTC  
 ATCCGCCCGC CTCGGCTCC CAAAGTGCTG GGATTACAGG CGTGAGCA CN CGCACC CGC CAGCTGCTTC TATTTTAATC  
 TGAAGTTGGA AACACCTTCC TACTTTAAGG CACAGGATCA GGGTAAGAAC CCACATGTAC GAGCTAACAG AGCTGCACCT  
 CAAATTTACT TAAGTTAATT AA

SEQ ID NO:601: (Length of Sequence = 319 Nucleotides)

AGTACTATTC TGCCATAAAA AAAAGAATGA GATCCTATCA CTGCAACAT CTGGATGGA ACTGGAGGTC ATTATGTTAA  
 GTGAAATAAG TCAGGCACAG AAAGAAAAAC TTGTCATATT CTCACTCATT TGTGAGAACT GAAAATTAAA ACAATTGANC  
 TCACGGAAAT AGAGAGTATA ATGATGGTTT CCAGAGACTG GGAAAGGTAT TGGGTGGGGG GCAGGGAATG GGGAGGTTA  
 ATAAGTACAA TGCAATGAAT ACGATCTNGT ATTTTACAGC ACAAAGGGT GGCTATGGTC AACATAATT TATAGTACA

SEQ ID NO:602: (Length of Sequence = 334 Nucleotides)

CACCCACAGA CTGCCAAGTG GGACAACTTT CTGGCTTTTG AAAGGCTCCT TCTTCAGAGC ATTGGGGAGT CAGCAATGTC  
 CGTTGTGTTA AATCAGCTGC TGCCCATGAT TAAGCCTGTA ACCCAGAGAA CCAACGAGGA CTACAGCCCT GAGGAACTGC  
 TGATCCTTCT CATATATATT TATNCTGTCA CTGGAGAGCT CACGGTAGAC AAAGACCTGT GTGAAGCAGA AGAAAAAGTC  
 AAGAAAGCAT TGGCTCAGGT CTCTGTGAG GAATCTGGAT TGTACCTTT GCTGCAAAA ATTACGGACT GGGGACTCTT  
 CAATTAATCT GACA

SEQ ID NO:603: (Length of Sequence = 410 Nucleotides)

TTTCACCATG TTAGCCAGGA TGGTCTCGAT CTCTGACCT TGTGATCCGC CTGCCCTCGGC CCCCCAAGT GCTTGTATTA  
 CAGGCGTGAG CANCCGCGCC CAGCCAGGAT TATTATTTT TAAATCAGAG ACACTGAGTA CCACCTAAAG GGACTTAAAT  
 TATGCAATTG GAATGAACT AAAGTGAATT GAACATTTAG TTTCATTAG ATTTTATTTT TCTGCCAAC TGTATATGA  
 GAGTTGAGA GGGAGCCCG ATTAGACTTA GAGAAAAATA AATAAATTAC ATTTTATCTG CACACATGAA TTCTAGAGTG  
 AGTTAAATTT ACCACAGCGG GGCATATATA TGTATATATA TGATACCNIG TTTTATATA GCTCCTTATA GTTTTAAAG  
 CACTTTGTAC

SEQ ID NO:604: (Length of Sequence = 399 Nucleotides)

TCTTAAGCA AAAAGAAAT GATGAAAGAA GCAAACTTGG AGCATCAGAA AGGAAGAAAG AACATGATAA AATGAAAATA  
 TGAGCTCCTA TTATGAACAT CGTATTACCA TTCATTGGA AACTTAATCG TATATTTATA TATAAGCATC CTTAGAGAT  
 GCTGIGGGTT CAGTTTCAGN CCACTACAAT AAAGTGAATA TAGCAATAAA GCAACTCATA TGAATTTTTT GGTTCCTCAG  
 TGCATATAAA ATTAANCTTC ATGCTATACT GTAGTCATTT AAGCATGCAA TAGCATTATG TCTAAAAANT GTACATACCT  
 TTATTTAAA ACGCTTTTAT TGCTTAAAN AGGCTAAATG GCCATCTGA GCCATCGGCT TTTTCTCTGG CAGAGGGG

SEQ ID NO:605: (Length of Sequence = 372 Nucleotides)

ATGCCTTAGA AATCCTACCA CCTCCCAGAA ATGATAGTTA TGGAAATTAA CATGGCATGT CAGATATGGT TCGCTGATGC  
 CTGCTTTTAG TTCTCAGAAA TAAGGCTTTA AAAGACTGGC ATGTTTCAGG ATTGCTGTCA GGAAATGATA ATTTAAAATA  
 CCAAGAGTA CACTAAGAAT TATGGAAGCA TCTGTGAAAC TAATAAGCCA GTGGACATAC TGATTTTAC CAATGTGTCT  
 ACATACTATA TTAAAAACT TCCTACAAAG TATTGTCCCA ATTCAGTTCA TCTGAGGATG TGAAACACT ACAGTGTACC  
 TTAAACATC ACATTCACAA CCTGACAGA CTGAAATAAA ATGAAATTAG GG

SEQ ID NO:606: (Length of Sequence = 399 Nucleotides)

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TGCCCTTCCTT TCCTCAATTC GAGACAGCAG TATCATTAGT GTTGATAGG TTATAATTAA ATCTAAGTAG TTCTTTGTGA  
 AATCAAAGTT TACAGTAATA TCAAAGAAGA CTGGGCAAAC GTCAATAGTA TTCAGCAATT CACAAACATG GTCCCTAAAT  
 TCCATAACAT CTACAAATGT GAAGTAATAT AATGCCAGAT TTINCAGAAAT CTCTGATTIT CCTTTCTGTA GTTGTCGAAG  
 CTGTTGATTG TTGTTGCGGG TTCTACAGC AGGGAATTTT CTGACTATGA ATTTACAGC AGATTCCAGG NTTTTGTGGA  
 TAAGATAGGA TGGNTTTGCC NTGGGNCCTC CACATGCCNT TCTTGATGTT GTAGAGGCGG GTGAGCATGC CGACGGCCC

SEQ ID NO:607: (Length of Sequence = 412 Nucleotides)

CTGTACCCCTT ATAAAGAGTG AAAGCCCTGC CCCTTCTCC TATAGAAGCC CTAGCAAGGA GACTGGAAGA NTCAAAAACA  
 ATCCACCCAA AAAATGSCCT GCAGGGACAC AGTCCAGAG AAAGAGACTA TGTACAACAA GGTACAGTAA GTAAGACCTG  
 CCCACACACA GGACTTCCAA TCGACTTCTT AGTGCTTACT CCTACAGATG AACAGATCAA CCAGGGCCAC CAGATGCTCC  
 AGGAAAGACA GGAGTCCAAA AAGAAAATTC GGTAAAGTTG AATATATTTT GAGCAAATTT TCAGTTCTGT TGAAGTATTG  
 GGGGGACATT CAACAGTGAG TAGTAGTTTA GGGGAACAG CTGGCACCTC TGGCAGTCGC CTCAGAGGTC AANCCAGCGT  
 NTAGGTTGCT TT

SEQ ID NO:608: (Length of Sequence = 419 Nucleotides)

ATGAAGGCAG CTGAAGTCTC CATCAAGTTT CTGCCTCCCC AACGTAAATAT GGAAGTCGTT CTGGCTGTAG GACCCAGCT  
 GATTGGAATT GGAAAGCACA GTGCAGCTGC AGAGCTCTAT CTGAATCTGG ACCTTGTCAG GGAAGCAATC GATGCTTTCA  
 TCGAGGGTGA GGAGTGAAC AAGGCGAAGG TTGTAGCTAA GGAGTTAGAT CCCAGSTATG AAGACTATGT GGACCAGCAT  
 TATAAAGAGT TCCTCAAGAA TCAGGGCAAA GTGACTCGC TGGTGGGTGT GATGTGATA GCTGCTTTGG ACCTGTATGT  
 GGAGCAGGGC CAGTGGGGAC AAGTGCAATTG AAACAGCTAC CAAGCAGAAC TACAAGATTC TGCACAAGTA TGTGGCTTTG  
 TATGCAACTC ACTTGATCC

SEQ ID NO:609: (Length of Sequence = 337 Nucleotides)

GGTGAAGTT GTAGTGAGCC GAGATCATGC CACTGCACTC CAGGTTGGGT GACAGAGAGA GGCTCCATCT CATAAAAAAA  
 GAAAGAAAA AGCATTCTCTG AAAGGAATAA AAAACAAATT GATAACATCC CCTAATCTCT AGTTGTTGGG ATGTAGTATC  
 CTTCAATTGA TCAGGAAATC ATATGATGT CCTTAAATTA TTAAGTTGGC AGAATTGTG TGGTTTCATA ATGATGCTTG  
 TAAGATGATA TTNTAATGGA AATGTTTTAG ACTATATCTN TTGTGTTTTT TNGTGTGIN TTTGTGTAAG GCTTAAANCT  
 ACCCCCTTTA AAAACAG

SEQ ID NO:610: (Length of Sequence = 441 Nucleotides)

TAAGCCAGAG ACATTTCACT GTATTAATCT TGATACIAAT TACTAAGGCT TTTCTGTGGA CATTAAATTT GATCTGTTTA  
 ATTGCAAATA CAATAAAGT CGTGATTTAT GCTTAATGTT TCTGCTAGGC TGATGACATT TTGAAATGG CACTTATAGC  
 CTGGTTTGTC TTGGTTACAA CTTTGTGGC TCCAGATGCT AAAAAAATC TAATTGAGTA AGTAAATAAT GCAGCTAAGC  
 GTGCCTCTCT CGCTCCGAA AAGTTTMTTC TACTCCTTTT TCTCCCTGGA GAGGCCCTGC TGCACACTGA TGCTGATCTA  
 AGGAAATGCC TTTGCTTCTT TGCCACTGAG CAATGTTAGA ATCACTAGGA GGGCAGGCT ATCCCACTGG TCACTCTGTC  
 CCAGCATATC TACCATGAAG TCAGCAGGGA CTACAACTC C

SEQ ID NO:611: (Length of Sequence = 344 Nucleotides)

TTTGGTACAG TAATTAGGTT TGGTTGATTC GGTATGGGG GTATACAGC ACATGCAAAC ACACACAGGG TGTGCGTGTG  
 TGTATAGG GGCATATACA CATGCACACA TATACATA TGTATATAG GATGTGTGTA TATGTGTGTA TATATATAGG  
 GTGTGTATGT ATCCTATATA TGTCCATATA CATGTATATG TGTATATAT ACATGTATAT GTACACATGT GTGCATATGT

GTACATATAT GTGTATATAT GTATATATCC CACATCTCCA ATTINCTAT ACGTATATAC ACACATATAT GTTATATAGG  
GTGTACAGAT ATAGGATATG TGTG

SEQ ID NO:612: (Length of Sequence = 384 Nucleotides)

TGATGACCAT AAGCCCATGC TTTCATAGA TGTTTAAGGG TTAAATGAGG TAATGCATGT CGAGTGCTCA GCCAACTGAG  
ATTCAGGAAG CGCTCAATAG ATGCTGGCTG TCATTATTAA CTGAGTAAGT AATCCTTTTC CCACAGAAGC AGTAGAAGGC  
TGACGATGTG TGTGAAAAGG ATGGATACAA TTCCCTGGGC CACAAATAAA GGTTTTTTTG GTGTGTGTG TTGTTTAAAT  
GAACIGAAAT GAGTTTGAGA GATTCAATATA TTATTTTACA ATACTTCTTA ATGCTAGTTT AAAAAGTTCA ACATTGTGAT  
TCTACTCCAC TTCCGTATGA GATAAGTATA TGAGGGNGCT TAATCCCCG NTAAACTAAG CAAG

SEQ ID NO:613: (Length of Sequence = 342 Nucleotides)

TATTTATTTT TGTGGGIGTC GACTTCCTAT GTGGGCTTTT TGGGIGACAC TCCCTTAAGG GTTCAGTTTG ACAATTCINA  
GAGTTGTCTT CGAGTTGGAG GCCACCAGAG GTATCTAAGC TCCCTGCTTC CTATTINATA ATCCTCCAGC CCCAGCAGGT  
CCACTCCTGG TTCTGTGTG TTGGCCCCG GCACAATCCC CACTGCTTTG CTAGACGTGC TTTCTGCCAT GTGGCTTTGG  
GCCTAGAGCT TGTGATAAT TGCAGCTTGT GGCAGTGGAA ATATGGCTGA ATGAGCGTCT AAACCCCTGG GTNGGGGNC  
TNAANINCNN GGGTTTTTAA AA

SEQ ID NO:614: (Length of Sequence = 393 Nucleotides)

CAGTGTATT AACAATAGCC AGGAGGTGGA AGCCACCTAA ATGTCCATCA ACAGATGGAT GGATAAATGA AATGTGGTCT  
ATACATACAA TGGAATATTA TTCAGCTTAA AAAAAGGAGC AAATCCTGCC ATGTGCTACA ACGTGGATGA ACCTTGAGGA  
TGTTTTGCTA AGTGACATAA GCCAGTCACA AAAAGACAAA CGCTGCATGA TTCCATTAT ATGAGGAATC TAAAGTAGTC  
AAACTCTTAG AAAGTAGAAT AGTGGTTAGC AGGGGTTAGG GGGAGGGGAA AAAGAAAAGT TACTGTTTAA TGGCTATAGA  
GTTTCAGATA TGCAATACGN NAATTTCTGG GGGATCTTT TGCACCACCA ATGTGCACCG TATAATTCCA CTT

SEQ ID NO:615: (Length of Sequence = 310 Nucleotides)

ATTATATACA TTCTTTTACT GATTTTITAA AATGTGTGCA ATATCTTCAG TGAACCTTAA ACAATCTGGG GAACGTGTTT  
CCTCAATTAC CACTTCAGCA ACGTTCATAC GAAATCAAGG CTGCGCTTCA TGTGAGTGT AGGNTCAACT TTAACCTGAA  
GGTTTGIGIT TGTCTCTAAC ATCTTCAGAG TGAGCTTTAG GGATGCCGTA AGGATGGACA GTACAAGCAA GCAGCTACTT  
CCATGATACA GTGGGAAGAT AAAAAGGCCC ATTCAGTCCA GCCGTGACCT GTAAATCCAG CTGCGCCTCC

SEQ ID NO:616: (Length of Sequence = 266 Nucleotides)

GAGATGGAGT CTCGCTCTAT CACCCAGGCT GGAGTTCAGT GGCACGATCT CGACTCACTG CAAGCNCOCG CCCCCAGGTT  
CACGCCATTN TCCTGCCTCA NCCTCTCGAG CAGCTGGGAC TACTGGTGCC CACCACCACT CCCAGCTAAT TTTTINIATT  
TTTGGTAGAG ACGGGGTTTC ACGGTGTTAG CCAGGATGGT CTCGATCTCC TGACCTGTG ATCCACCCGC NTGGGGCTCC  
CAAAGTGCTG GGATTACGAG CGTAAG

SEQ ID NO:617: (Length of Sequence = 376 Nucleotides)

ATAATAATGA AAAGTGAAGG GTGGGGGTGC TGCCACCTC CCATTTCTTT GCCTGGGTGG TGGTGACCAC GGCGCCCTTG  
TGTCCTTTCC ATTGGTTACT GAGGACCATT GCCCTCATGG GCCCAGGCCA CAGGCACCCA CCGTINAGCC TCACCTGCCA  
CCTCTCTCCA TGTGCTTIN TTGCCCCCTG GCGTGGCCTG GGCATGGGGG AGCTTATNTC CCGACCAGG GGCTTGGCCA  
TGINTCCTTC ACAANCCCCA CTCCCCGGG ACTGAGCCTC CACTCTCTGC TGGGCTGAGG GCTCTGTGGT NGCCAGGAG  
CCCTCCAGC CACGTGCCAG CCCATCCCAT CATCAGCACT TGGTTTTAAG CTTCAA

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SEQ ID NO:618: (Length of Sequence = 352 Nucleotides)

GCCCATCCTG GCTAACACGG TGAACCCCGT CTCTACTAAA AATACAAAAA ATTAGCCAGG CGTGGTGGCG GGTGCCCTGTA  
 GTCCAGCTA CTGGGAGGC TGAGGCAGGA GAATGGCATG AACCCGGGAG GTGGAGCTTG CAATGAGCCA AGACTGCGCC  
 ACTGCACTCC AGCATGGCGG ACGGAGCAAG ACTCTGTCTC AAAAAATAA TAATAATAAT AAAATAAAAA GTTTGTAGT  
 ATTAGCAGAT ACATATTACT AGGTACCCCC CATGCTCAAT GAAGTGTGG GNTACTCTNA AAAAGTGTCC AATCTTACAG  
 GTGTGACTTC CTCTGGAAT GCAAATCTTT TT

SEQ ID NO:619: (Length of Sequence = 359 Nucleotides)

AAAAAAACG ACCCCACAA GGGGAAGGC CCCAAGTGGG CCCCTGCCTG TNGTCTCTC TGGCTCCAGA GATGTCTGCA  
 TAGGCCTCAG CTCTCTACTG GCAATCTCC TCTTCATGGG CACCAGCCAC TGCTAAACAT CCTTCCCTCA CTCTCTGTGT  
 AAGCTTGCTC CCTGAGCCA CAGGTTCAC ATCTAAACCT CAGTCCAGG GAAAGGAAGA ACCAATGGAA GTGCCAGAGT  
 CCTGGGGCAA GCCAGAGCAT CACCTGTGAG CAAACCTCTG CTGGGCACTC TAAGCAAGCA CAGGACAAGN CCCAGAGTTT  
 AGTGTGTCCA GTATCCAGCA TGGGACAGC ACATGCATT

SEQ ID NO:620: (Length of Sequence = 447 Nucleotides)

CTCTCTCAGC ACAGCCTGGG GAGGGGGTCA TTGTCTCTCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG  
 CTGCCCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTGTG TGACTCTAAG CTCAGTGCTC TCTCCACTAC  
 CCCACACCAG CCTTGGTGCC ACCAAAAGTG CTCCCCAAAA GGAAGGAGAA TGGCAGCCTC CACATCTCGG GTTCAAGTGA  
 TTATCCTGCC TCAGCCTCCA AGTAGCTGGG ATGTCAGGTG TGCACCACCA TGCTGGGAT AATTTTTTGT ATTTTTTAAG  
 TAGGACACGG TTTCACCATG TTTGGCCAGG CTGGTCTTGG AACTTCTTGA GGTGTAAATG ATCTTNCCTC ACCTTNTGCC  
 TTCCAAGTG CTGGGATTT ACAAGGTTTT AAGCCACCG AATCCAT

SEQ ID NO:621: (Length of Sequence = 237 Nucleotides)

CAATACCCCT GGTCTCTGGG GCAGGTGTTC TGGGATCCTG GACAGGAGGG TCAGGTTCGAT TTTAACCAG AGAGACCTGA  
 TCTCATCACT GTCTTTTAGA GGGGAGAGAA GTTCGTNCCG GCCAAAGGGG ACCAGTGTGT AGAAGTGTCT CTCACGCTCC  
 TTGGCGATGT CACTNGTGT CTTGGCGTIN ATGGAGCTTA CAGGGGCCCT AGGACCACTG CCCCCNTTGG CAGCGGC

SEQ ID NO:622: (Length of Sequence = 247 Nucleotides)

AGAAGGTCAA TAATAACAAA CTCTTTCAAG GTAAAGCAGG ATGTTGGAAA CCATTGCAAG GAAGCTAAAA ACCTTGAAAA  
 AAGATTAGAA GAATGGCTAA CTAGAATAAA CAGTGTAGAG AAGACCTTAA ATGACCTGAT GGAGCTGAAA ACCATGGCAC  
 GAGAAGTACG TGATGCATGC ACAAGCTTCA ATAGACAATT CGATCAAGTG GAAGAAAGGG TATCAGTGAT TGAAGATCAA  
 ATAAATG

SEQ ID NO:623: (Length of Sequence = 315 Nucleotides)

AATTTAGSIT TGTTTTATTT AAGTTTAATG TTAATTCAT GCTGTGTTTC AGTAAGANCA ATACAGATTTC TGTATCTGTG  
 GCTCCAGTCA GATATCCAGT AGTACAAATN AGCTTCAAGT TACACATACT GANCAAAAGA GGTGAGCGA GCGAAGGAGG  
 GGAGGAGTGA GGGGAAGGAG GTAGGGGAG GGGGAAGGAG AAGAAACAAA AGANTTGAAC AGGCATGCAG GCTTTTCCAT  
 ACCACCTTCA ACGCTAACCT GCTTCAGTGG GAGAGTAAAG TAGGCAAGAN TGAGCAGCCA CGGATTGTTG AACTG

SEQ ID NO:624: (Length of Sequence = 375 Nucleotides)

CCATGTTGGC CAGGTCTCGA ACTCTTGSCA TCAGGTGATC CGCCCGTTTC AGCCTCCAA AGTCTGGGA TTACAGGCTT  
 GAGCCACCAG GCCTGGCCCG TTACTATTGT TATTTTAA TGCATTAGTA AAAAAAAA AAATTTTAAAT TGCTAGAACA



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TTAAATATCA ATACCCACAT TAATAAAGC TATTTGGGAG CCTTAATAAT TATCAATGGT GTAAAGGGGT CCTGAGACCA  
 AAAAGTTTGA CTTCACCAGG TGTTTGAACA CTACAGATCC CATCTTGCCC ATGAAGCTTC CCTAGACATC CCCACCCAC  
 CGTGCTCCNT TCTGCATCCT ACAATAGCAT CCACTGGTAA GGGCCACTTA TTTTA

SEQ ID NO:625: (Length of Sequence = 305 Nucleotides)

GTTCCTAGAT TACTCAAAT TAGTACTCTT CCATCTTTTC TTGTGCTAT TCTTTTAAA TCACAAGAAG TCATAACTT  
 AAGTAGGAAT TTGTATAATG TAACTTATG TGAGTATATT TCCTTACCAG CTCATAAAGA ACTATGTAA CTGAATGCA  
 TATTTTINAC ATAAAAATAG CAAAAA AAAANCAAAA AAAAAACAGT ACTGGCCTAA TACTIAGINGA NTTACAGAAT  
 ANGGGTAAAT ANTACATGNN CATCCTTACA GAGTGAGCAT AAACAATACA TGGTAATAAT ATTTA

SEQ ID NO:626: (Length of Sequence = 300 Nucleotides)

AGCAATCACA TAAGGAAGGC ACCTCGAGTC TAGTAACACT GTGACTCTTG CGGTCTCTTA GAGGTACTTG GTGGTCTTGG  
 ATAAGATCTG GAAGAATTCT TTGGATTTC AGACATAGGC TCTGTNCTC TTCCCTTACT TTCTCCCAA CAAATGGCAT  
 CTCTCTCTCT CTCTCTCTGT GCTGAGCTGC CTAGAAGTGT GGGTGGGATC ACACAAGCAC CCTTNTGGCC ATTGCCCTTG  
 GGACTGTGCT AGGTCAGACC TGAAGTCAGC ACAGCATTGG GTCTCACCCA ACACCTGTGG

SEQ ID NO:627: (Length of Sequence = 369 Nucleotides)

GAAAAAGAGA GAGGAGAGGG AGTCAGGAGT GCTTTGGAAC TGGAGGTTTG CTTTCCACTG ACAACATCCA TATCTNCTGC  
 TAATGCCAAC ATGCTCCCAA GTGTCTTAGT GGGTCCACA AAGTTGATCC AGCCGAGAAG AGTTGCAGGG ACAGTCAAGA  
 AACCAGAGGT GCTGCCACA TCCCATCAC TCCCTTTCCC AACTTCCAG CCTTGCCCCA AAAGCAGCAG CTCAGGACAA  
 CCTGAGATAC TACTGTNATG GGTCCCCGGG AGGAGGACAG CAGGAGTCTG AACTCCAGAG GAGGGGAAT ATGGGTAAAA  
 CAGAGAGATG GCAAGGAGAC AAGCTGTNCC CAGACAGAGG GATGGGAGG

SEQ ID NO:628: (Length of Sequence = 310 Nucleotides)

TTTTTTTTTT TGAGACAAGA GTCTACTCT ATCACCAGG CTGGAGTGCA GTGACATAAT CATGGCTCAA TGCAGCCTCG  
 ACCTCTCAGA CTCAGTGAT CCTCCACCT CAACATCCCA AGTAGCTGGG ACTACAGGAG AGCCACCATG CCCAGCTAGT  
 TTTTINACTTT TCTGCAGAGA TGGTGTCTT CCATGTGTC CAGGTGGTTC TCGGAAGTCC GGGGCTCCAG CGATCCTCCT  
 GCCTCAGTCT CCCAGAGTGC TGGACCCACA GGCATGAGCC ACCACACTCA GCCCCAAAAT CCATGATTTT

SEQ ID NO:629: (Length of Sequence = 443 Nucleotides)

CGCAGAGCAG AGGGTGGAAA GGCAAGAGT ACAAGTGAGC GAGCCCTTTT TGTGATGGCG TTGATCTGTT TACAAGGGGA  
 CTGCCTAAAC ACTTTCCATT AGCCCCACT TCCCAACACT GTTGCACTGT TGCACTAAG TTCCAACAC ATGAATGCTG  
 GGGGACACAT TTAAATTAGA GCAGTGATGA TCAGAAAGTT ATTGTGGA AAGGAGGTTT TATTTTAACT TAAGTAGCTT  
 GAAAAAGCTC TTCAAGGAGT TGATACAAGA ACTGAGATTT GAATTAGAGG ACCGAGTAAA GTGAAGAATC TCGGGGCAA  
 GTCCAGGCA GAGGGAAGAG CAGGAAATGA TTCATCAGTA GACTTGCTCT CCATCTCTG GCAAGGGCTA TTTCATTTT  
 TCTTCCACTC TCTTCTCAG CACATCTCCA CCTGGGTTT CTC

SEQ ID NO:630: (Length of Sequence = 263 Nucleotides)

TGGATGTGGT GAAAGCGAA CACTTATAGA CTGCTACTGG GAACGTAAGT NAGTACAACC TCTATGGAAA ACTGTATGGA  
 GATTTTTTAA AGAACTAAAA GTATATCTAC CATTTGATCC AGCAATCCCA CTGCTGGGTA TCTACTCAA GGAAATAAG

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TCATTACATC AAAAACACAC CTGCACACAT ATNTTTATTG CAACACAATT CACAATTGTA AAGATATGGA ACCAACCTAA  
GTGCCCATCA ACCCAATGTA GGG

SEQ ID NO:631: (Length of Sequence = 221 Nucleotides)

AATTTTNACA TATCAGTAAT TGTTTTTATA ATTTGTGGTT TTNATGAAAC ATTGCTATGC ATTTATTAGG AAAAAGTGAA  
TTTCCCAACA GGTGAAGTGA AAAGNTATTT TAACTATTAT ACATAATCAA GATCCTGCCT CTACGGAATT AGCTAAACCT  
AAAAATGTTT GCATTAATGN ATAAATTCIT CCGCATTC CTGGGCCNGN TCTGGAGGTG G

SEQ ID NO:632: (Length of Sequence = 344 Nucleotides)

TGTGATGGAG ACAAATACTT CAGTATTGGG ACCCATGGGA GGTTGCTCA CCCATTACCAC AGGACTAAAT CCAAGCTTGC  
CAACTTCTCA ATCTTTGTC CTTTCTGCTA GCAAAGGATT GCTACCCATG TATCATCACC AGCACTTACA TTCTTCCCT  
GCAGTACTC AAAGTAGTTT CCCACCAAC ATCAGCAATC CTCTTCAGG CCTGCTTATT GGGGTTGAGC CTCTCCGGN  
TCCCCAAGTT TTGGTTTCAG AATCCAGCCA GAGGACAGAC CTCAGTACCA CAGTAGCCAC TCCATCCTCT GGAATCAAGA  
AAAGACCCAT ATCTGCTCA CAGA

SEQ ID NO:633: (Length of Sequence = 378 Nucleotides)

GGTCAGACCT GAAGCCGGCA CAGCGCTGTG ACTGCCCAAG ACCCCACTG TAACAACAAC CCAGCTGCCA CCTATTTCAC  
TCAAGSCCCC AGGGCTCTCC AATTAGCAGG TAGTGAAGCC AGCCAGGCTT CTNTCCTTC CTTCACTGCA GTAAGCTCCC  
CTGGTCCCTA GATGCATTCA AAGGTGCTGT CTGAGAGCCA GGGCTCTCAG TCATAAACCT TATAAATCTA CCTGGNGTTC  
TGTTCTACCA TCGCTGAGCT GGCAGTGAAT CCACCCGGCA AATCCCTTC CACTNTCCC TCCCCTCTN CCCAGGCAGG  
GTAGTCTGTT NCCACCTACG ACGTCATCAC AGTCTCATGC GGGATTACTG CCAGCTTC

SEQ ID NO:634: (Length of Sequence = 28 Nucleotides)

ATCAGTGGTC TACCACAGNT TAAGTAACGG GTCATATT GAGTATCACA CATCTCAGTC TGTAGAAAT TAGGNACAGC  
AATTAGGAGT CATGCACATA TANGAGATGT AATCCCACCT TTGACTATA GCTACTCTT GINTTTTACA GAAAAGACTG  
TGGNGGAAGA AAACCCCTTA CCCINTNTT CAGGGAGAAA CTACANCAC TCANCTGCCT GGCAGTGAAA ATNTGGCATC  
CAGTCCACTT TACCATCAGT GTTTAAGGAA ACCATCTCTG GTAAGC

SEQ ID NO:635: (Length of Sequence = 226 Nucleotides)

TTGGGATGAT GCTTTTATTA AACGGAAGCG TCCAAAAGG TCTGAGTCAA TGGTGGAGAG GGCAGTCAGC CCTGTGGCAT  
TTCAGGGCTC CCCACCGATA GTATCGGCA GTGCTNACTG CAATGTGATA GAGATAGATG ATACCCCTGA GGAATCCGAT  
GAAGGATGTG ATCCTGGTGG AGTCTCAGGA CCTCCACTT CCATCTGGG NGTGCCCTC CCTCA

SEQ ID NO:636: (Length of Sequence = 367 Nucleotides)

AACGCAATAA AAAGACAAAT TCCAAATGG GCAAAGATC TGAATAAACA TTTCTCCAA GATATGCAA CAGCCAATAA  
ATACATGAAA AGATGGCCAA CATCATTCAT TATGCTATG AGAAATGTAA GTCAAAACCA CAATGACATA CCAAGTTGCT  
CCCACTAGGN TAGCTACAA CAACAAATG GACAGCAAAA AGTGTGGTG AGGAGTAGAG AAATCTGAAC CCTCATGTAT  
TGCTAATGGA AACACAAAT GATGGAGCTA CCATGAAAA CTGCTTATCA GTTTGACCTC GGAAGTTAA ACACAGAAGT  
ACCACATGAT CCAGCAATTC CACTCTAGG TATATACCC AAGGACT

SEQ ID NO:637: (Length of Sequence = 384 Nucleotides)

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TTCAATAAAA TTTTACTTAA AATCTGTAA GCTAGATATT GACTATCCTT AGTTGAGTCA CTGAGGTTTA AACACAATGG  
 TAAGTCTTAA AGTCTGCTAT TTACAGAGCA TTGAATCTGT ACCAATTTGC AATAGAAAGC CTTCAAGTATG CAAGAAGTTT  
 GCATGGGTAT TAAGAACACA GCCTAAATTA GGCATTTGAT CTAATCTGCA GGAAGAATTT TCTTCCCCAA AACAGAATTA  
 TAAAAGCTTA CTTTAAACAG GAGGCAGAAT AATTCTTTTA GGAAACCATT TCATTCTGTT TCTACTAACC TATACCATCT  
 GAGGAATTCT AGGGAGGATA ATAAAANTCT CGTGATATCC ACAGCAAAC TACATACCC TAAAG

SEQ ID NO:638: (Length of Sequence = 409 Nucleotides)

GAAATTTTTC ATCAGCTCTT GTTCTCTCTC ATTCTTTTIG ACCTTGTAAG TTTATCCTTT TTTCTTAATT TATTCTCACT  
 TAATGGGATT TCAGGAGCAT ATTGACTAAG TTTTCATTTT TACATGTATA CTGGGGAGTA TGACATAGAC ATCTCTGTAC  
 TTAGATATTA CTGATGTAAG TCTACTTTGA ATCAAATGAA CAGATGTTTA AAAAGTATTG TNCCTAATTG TTTTAATGAT  
 TTCINCCGTG GAGTTGGGGT GGTGCTGCCC ATCACCACCT CAGGACGGGT ATTTGAAAAT ACCTGGGNN AATTGTAAAC  
 ATGTCTGGGA AAACACTGCA GATATTTTA ATTGGGCAGA GGGGTCAAGG GGATGGATTA ACCATTGCGG AAATGTGAGG  
 GACGGGTCC

SEQ ID NO:639: (Length of Sequence = 197 Nucleotides)

GGTCTACTC ACGGCTCAAG AGCATGGCTC AGGAGGAGAT CCGCAGAGAG ATGGACAAGA TNATCGAGGA CCTGGAGCTC  
 TCCAACAAAC GGCATCACT GGTGCAGACA TTGTGGGGTG GCATGAAGCG CAAGTGTACC GTGGCCATCG CCTTCGTGGG  
 CGGCTCTCGC GCCATCATCC TGGACGAGCC CACGGCG

SEQ ID NO:640: (Length of Sequence = 398 Nucleotides)

GAGAAGGAGT TTCGCTCTTG TCACCCAGGC TGGAGTGCAA TGGTGCGGGC TCGGCTCACT GCAACCTCTG CCTCCCCCGG  
 GTTCAAGGGA TTCTCTGCGC TCAGCCTCTT GAGGAGCTGG GATTACAGGC ACCCGCCACA CACCCAGCTA ATTTTCTATT  
 TCCAGTAGAG ATGGGGTTTC ACCATGTTGG CCAGGCTGGT TTGGAACCTC TGACCTCAGT TGATCTGCCT GCCTGGGCTT  
 CCCAAAGTGC TGGGATTACA GCGGTGAGCC ATTGGCACAC AGCCTTATCT GCATTTTCAA ACGGGCCAGT ATGGATGGGT  
 TTTACACTTA TACTNGAAAG GTCATCCTTT TNAAAAAANG AACCTTTTAA ACCATTAACT ATATATAAAA ACTATATT

SEQ ID NO:641: (Length of Sequence = 402 Nucleotides)

ATAATTTTNA GCAAAATGAT ACAAACCTNT NTAAACCAAG TAGAAGATTG GTAGTTACAG TGAATCGTC AGGGAGTACA  
 GGGCGGCCAC CACTGGAGGG AGCTGAGGCC CTGGAAAAGG AGTCTGATTC TTTGCAATTC TCTCTCTGCT TTTNTTCCCA  
 GCCCCGTAC AACCGAGTTC ACGTGGGGGG CCGCAGTGCA GCCCCAGCG TGGCAGCTCT TGGAGTCTGT CCGTTTAGTA  
 TGTTTCCCCC ACGAGCGTCG CTGGGTGAGT GGCTGGAGA GCTCCCGGTG TTAACATTC GATCCTAGAC CGGGGGGACG  
 TGTCAGTAGG TAAAGGCCAT TGGGTAAACCA GAGTAGATCA GGCCATGGCA TTTGCTGCGC CCCTTTCACA GCAATTAAGG  
 GG

SEQ ID NO:642: (Length of Sequence = 395 Nucleotides)

CTTCAATGAT GCAATTCGAT TAGCTGTGTC TTACAAACAG AACTCCCAGG ACTTCATGGA TGAGATTTTT CAGGAGCTCG  
 AGAACTTCAG CTTGGAGCAG GAAGAGGAGG ACGTGCCAGA CCAGGAACAG AGCAGCAGCA TCGAGACCCC ATCAGAGGAG  
 GCGGCTCTC CCCACAGCTG AGGGGCTGGG GCTAGGGGTG GGTGGAGCCC TTTTAAATA CCGTCCCTT CAACAACCTT  
 CCAGCTCTGA ATGGAGAAAC TCTCTAGNC ATCCCTCTT CTACCTCTG CAACCCACCC ATCCTATTAG GCTNCCACAT  
 TCTAGGGCCC GTGATACAGG GGATGAGGGT CAGCAACCAG CAAAACTCTN GGACTTGTTG GGAAGAATTT TCCCC

SEQ ID NO:643: (Length of Sequence = 325 Nucleotides)

214

GGTATCTTAA AGCCTTTCAG GGATTTCAT AGACACATTT CTTTAGCTGA AATCTATCT CTCAGAACT TACCCAACT  
 TCTTAATAAT GTNCAATTC TAAGAAAGAT ATCATGGCTA CACAGCACCA GGNAGAGCAC ATTATTTCTC TTCACAATTC  
 CCTTGCATAG CATCATGGCT TCCTAAGGGC TTTTAAGTTT ATTGCTTCAA CTGATTCTCA TAAAATCTCT GAGATGCTAT  
 CTGGAAAGTA TTATTATCCC CAGTTTGCAG ATAAGGCAAC TGAGGTCTAG ACTTGCTAAA AAATCACACA ACCAGGTAAG  
 TGGGC

SEQ ID NO:644: (Length of Sequence = 373 Nucleotides)

CTTCACATCA GCAGCCGAC GAGGTGACTG AAAATCCAAA ACAGAAAATT GCAGCAGAAA GCAGTGAAAA TGTGATTGT  
 CCAGAGAATC CTAAATGAA GTTGATGGA AAACGTGACC AAGAAGGCAA TGATGTAAAA ACAGCAGCTG AGGAGGTACT  
 AGCTGGTAGA GACACATTAG ATTTTGAGGA TGTCACAGTT CAATCATCAG GCCCGAGGGC TGGTGGTGAA GAATTAGATG  
 AAGGTGTTGC AAAAGATAAT GCTAAAATAG ATGGTGCCAC TTTAAAGCAA TCCTINGAAGG ANCCAGAGGA GCGAAGGATG  
 CAGATCACTG CACCCGTACC CCAAAAATTG GAAAGTCCCC TCACAGGCCA TTT

SEQ ID NO:645: (Length of Sequence = 310 Nucleotides)

TTTTTTTTT AAGACTCAAG GTAATGAAA CTATGAGTAG AATAGTAAGG TGTGACAGGG GACAAATAAG TAGATATAAA  
 ACTATGCTGC AATATTTTAG TTATTAAAGC TGGGAAATAT GCAAATGTAA GTAGTGCTTG GAACCAGAGA AGGTTCTATA  
 TTTAGCTGTT CTTCGTAGC TAAATCTGAC AAATTGAAAA ATATCATATT CTCTGCTCTA GGTACATTTT ATGTATATTT  
 TGACAGCATA TCAAATATAT GANACATTAG GTTAAATAAA TTAAATCCA GTGGGATAAA CTATATGGGG

SEQ ID NO:646: (Length of Sequence = 362 Nucleotides)

CTTGGGATTG CTAGATCAGT GTTTTAGACA GGAATGCCAA GGCAGAAAAG AATCACATAT CCAGGACCAC ATAAAANCTG  
 GAGTGATGT CATAACAAAT TTNCTCTGT GCTTAGAAT TTTATGGCTT TGGATTTTAC ATTGATGTTT GCAGTCCATT  
 TTGAGTTACT TTTGTATCT GATATGAAAT ATACCCAAGT NCATTTAAAA AATAAGATTA TACAGTTGTT TATGGAATGC  
 ATTTATGTAC ACGGGTAATC TGTTTGTATT TTGTGTGTAT GTTAAACAT CTTTATTATA GTATTNTGTA AGAGTAGGTT  
 AATATTGACC TTGGGCATTT TTAAACCAAG GGGGGAATTT CC

SEQ ID NO:647: (Length of Sequence = 226 Nucleotides)

TTTTGGGCTC AGATCTGTAA GTTATTTGC TCAATGTACG ACAGCTACAT AATGNTTAC ATTCATGATA TTCCATCACT  
 GAGGAACTG CTAAAGATGG TCCGTGTGTG AAATAATTCC TTAGAGAAAC ACGGAGCTGG AAAAATAATC ACTGATTAGA  
 CCTTAAAAAT AGTTCACTGC ATAACATGNC AAAAAGCACA AAGGCTCATT CAGAGAACAT ATTTGT

SEQ ID NO:648: (Length of Sequence = 198 Nucleotides)

AACTAAAAAG TTAAACTTT TACAAAACAA CAAGTTTCC TTAAATTATG ATTTGTTATT ATAAAANCTA GTAAGAAAAA  
 ATTCCACCAC ATGAAAGCAT TTNCTAAAT TCATACCCC GTACCTATT TTAANTACAG TTGGTAAATT GATTAAAGCTC  
 TATTINCATT TTGANTGATC ATCGGTTTAA TTTTATTT

SEQ ID NO:649: (Length of Sequence = 337 Nucleotides)

ACATCTGCAG CCATATATGA GGTCCCTCAT GAGACTTAGC AACAAGGTGT GTTTAATGT GACAGTGTGT CTGATGTGTC  
 CCCAGCACAT TGGGACCACT ACACAGTGT ATTTGTACAT CTGCTGAGTA ACATTGAGTG TGTGGGTAAC TAAAGCCCTC  
 AGTAATTATT TACTTAAATG TTTTCAAGCT TAATTCGTAT CTGTACTTGT CATGATTTAT TATTCCTTGT GCTAAATCT  
 TCAATGTTCT TGCCTTGATT GATCTGTCAT TATCTATCAC TTAATAAAA TANTAATNC CTTAATTAA GTCATGGTTA  
 AATGAGGGAC TTGTTT

SEQ ID NO:650: (Length of Sequence = 286 Nucleotides)

GGGTTGAAAG GAAAGGTGAC AGGAAAGATG TGTITAGCAT CCATGAGCAG CTGGGGAGAG TCTTTCTGT CTCGTAAACG  
CATCTGAGAA GATTAGGAAA AAAAATAAAC AGAGCATCAG TTCTTTGAAT CTAAAAGACT TINTTCTACT AAAATTTCTA  
CCCTCAAATT CTCAACTAAT GAAGANTGTT TACTTTTGT TTAACCTCAC TTCATTTTCC CAATTAACCTA TTATCAAAAA  
AGTTAGTGCA TTGTAAATA AGNTAATAAA GGNTAACACA TTATCC

SEQ ID NO:651: (Length of Sequence = 360 Nucleotides)

GATAATGTAA ATTTTGTCTT CIGGGCTGT CATCAGGATT GCAATTTTNA GATTAGTTT GCTAATTGTT TGGCCTTTGA  
AAAAATATAT ACACTTGGTT TGTITTTGGTT TTCTTAAGTC AAAACAAGGA AATAAAATCA CATTTGCTTT CCAAGAAAAG  
ATAATGTTTA AGTGGTTGTT TAGTGTITTTG TGTCTTTGGG GGTGGGAGGG GGTGTGTGGA ATACACAAAC ACACACACAC  
AAACACACAC AGTCTATATA TAANCITATT GGAGCCATCA CTATATTTTA AGGAAAATGN AAATAATCTA TTGAAGCTTT  
AAAATTAGGA ATTTTGTATT TAAGCTAAGG AGCCTATTTT

SEQ ID NO:652: (Length of Sequence = 353 Nucleotides)

GTGGTGGGNN CCTGTAATCC CAGCTACTTG GGAGGCTGAG GCAGGAGAAT CGCTTGANCC CTGGAGGCAG AGGTTGCAGT  
GAGCCGAGAT CGAACCACTG CACTCCAGCC TAGGTGACAA GAGCGAACT TTGCCGGCAT TTACACTCTC AAAAGATTTA  
ACGCAATTAC AATCAAAAAA CACTTGTCTAT ATATAACACT TTTTCACATG GAAATAAATT GGTGGTTTAA GGTTTACAAT  
TCCTTTGAAT AAAATTTTCA TTATTAGTTA CAAAATGCTA AGACAGATTG AGGTCTCAA GAAAGANCTT TGAGGAAAAT  
TTATGGTTTT AAAGGGACTT TCACCAAATA TGA

SEQ ID NO:653: (Length of Sequence = 224 Nucleotides)

AAGACAGGGA NTACTTTATT CAAAACCCAT CACAGAAATG GACAGCTTGG GTCTGTAAAC AAGCATTCAT GTTTTAGNGC  
ATAGGTCACT AATTGTATAT GAGAGCATAC ACTGCTACAT ACAAATTAAC TGNTCAGACC ACAACTTTTC AATGTTTAA  
ACAGNATAAG CTTCCTGTGA AAAGCAGCAC CTTTGTGTAC GNTTAACCT TAGTATTCCT CTCC

SEQ ID NO:654: (Length of Sequence = 353 Nucleotides)

GTCAACTCTA TTTTCCATAT GAATTATTAG ATTGGTGCT GTCTGTGTA GTAACCTGAT ACGATAGATG TGTAGTATGA  
ATTTTGTCCA CATGGTTGTG CCTTGGCAG AACTGCACGT ACCTGAAATG GTTCCCTAAT TTTTTCCTAG TATTACTATC  
CAACACTTCC TCTCATAATC ACTAGTGTAT TGTATAATG TTAAGTGTCC TTTATTCATA TATTAAAT AAAGAATAC  
TCTGGTAGGA TTTTGAGGGC CAATAGTGTA TTCCACTGT TTGAGGTATT AGGAGGGCTA TTTACTGATA CCTGTAGTGC  
CTTCCCATTC TGGTTATCA TGCACCTCTA AAT

SEQ ID NO:655: (Length of Sequence = 365 Nucleotides)

GAAACTINACT TCACATTTCT CCAGGGAGGG ATGCTTTGGA AAAACTGCTC AGTGAGATGA AGCACAGATC TGCTTTTINAT  
CCCTTTTGTA CCTTTTAAA GACATAAGGT ATGTTTTGAC ACTGGAGTAT ATATGAGGGT TGCTAACGTT TAGGTTGAAA  
GAGCTGCTGT TGTCCACAGC TTATTIATTT NCCACCCATT TTTGTCTCCT GGTCTCATCC AGTTACATTT CCTGGGATAT  
GTTTTTGGAG GTTGCTCAGA TCACGGCACT AGAGTCCCTT TGGGTTTCTC CTCCCCTCTC TGCTIATTTG GCCTGCCCCT  
TGACAAACAT TCCCCACATT CACAACCAGG CCTTTGGCTA AATGT

SEQ ID NO:656: (Length of Sequence = 372 Nucleotides)

GTCAATGAGTC TGAGACCAGC CTGGCCATCA TGGCAAAACC CTATCTCTAC TAAAAATACA AAAGTTAGCT GGGTGTGGTG  
GCGTGCACCT GCATTTCTCAG CGACTTGGGA TGCTGAGGCA GAAGAAATCGC TTAAACCTGG GAGGCAGAGG TTGCAGTGAG

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CCGAGATCGC TCCACTGCAC TCCAGTCTGG GTGACAGAGT GAGACCTTGT CTCCAAAATA AAAGAAATTT ACTGCAAAGG  
 GATGTTGCAT TTCAGGTGAA TGTATGTAGC CTTTCAGAGG CCGGGCTATT TATTAGATGT ATTTTATAAC TGAGGGTTCT  
 AGGTAAACAC AAGCCAAACA GATCCACCAG AAGCCTAGAG CTGTGGACTC TT

SEQ ID NO:657: (Length of Sequence = 334 Nucleotides)

GGTGTGGAA AAAAAAACCCT CCAGATAAGA TTGTGCCTGC TTCATTTTCT TGTGAGGCTG CCCAGACAAA GGTACTTTTC  
 CTGATGGGG ATTCTATGTC ACCTGATTCA GATACTGAGC TTCGAAGTCA GGCAGTGGTG GATCAGATTA CCAGACATCA  
 CACCAACCA TTGAAGGAAG AAAGAGGGGC TATTGATCAG CATCAAGAAA CTAAACAAAC AACCAAGGAC CAATCTGGAG  
 AGTCTGATAC ACAGATCATG GTTCTGAAG AGCCCTGTGA ACTTCCCTGT TGAATCATT CAGACCCAGA AAGCATGAGC  
 TTATTCGACG GATA

SEQ ID NO:658: (Length of Sequence = 286 Nucleotides)

ACAAACCAAC TGCATTTCTT TCTGGATATT GTTGAACAAA AATAGCATTC AGTTTACCCN CTAGTGCTAA CAGAAGNGNC  
 TCAAGCTGTT CCCCCATCAT GGGNGCAGCC CTTAACAGAG GGCTGCACAA ATCTGCAGTG CTGCTCTGGG GAAGGCTNCA  
 AAGCACTTTT TTCCAAGAA GGGATGCTGT TCANGTCTGT TAGGGGAAGC ACACCGNCTN TGCCTGGGCA CAGATGAAT  
 GCCCTTCAAG GCAATCATCA TCTTTTCTT AATAGGAAG GTTTGG

SEQ ID NO:659: (Length of Sequence = 321 Nucleotides)

GGTCTTTTATA TGTTCOCGAG ACAGGACTGA AACTCCCTGC TTCAAGTCA TTTTCCCTAAG TAGCTGGGAC TATAGGCTGT  
 TTCTTTTTTT AAAGGAAGGA TTTTATGTTT ATCATGAAGG AAAATAA ATTTGGCTAA CTTAAGAGT TATTATCAG  
 GAGACACTAT TAAAAAAGG CAAATCAGAA ATTTGGAGAA ATTTTAA ATACTGATAA TAAGACAGAA TTGTACCCCTG  
 TAACCATAAA TATGTAGAAT TTCTACCATA TCAATAAGGT AGTTTCT GTTGCTCCAC ATCTCTTGC ACGTTTGGGT  
 A

SEQ ID NO:660: (Length of Sequence = 302 Nucleotides)

TTTGTTAAGG ACATAATGTT TTTGACTGGG GATCATGTTT GGCTGATGTA AATATTAATG CCAAAATAGG AGCTAGGATG  
 AAAGTAACAC TGTAATTAGT AGTAGAATTT ATTTTCATTT AAAATGTGTC ATGACGTAAT TTTTATGGCT TGGCTCAAGC  
 AACAAATTTT AGAGTGCACC CTCATTGATG CTACTCACAG AGACGTGGAT GTGCTGTTAC TGCTTTCTAA CTCTGCCTAC  
 TAGTGGCCT ATTATGATGA TGAAGTTGAT AAAGTAAACC AGTATCAACG NCTAAGTCTA GG

SEQ ID NO:661: (Length of Sequence = 249 Nucleotides)

AAAAAAAAAA ACTCTCAAGG GTCTAACTTT ACCCATCATA AAATAATTTT GGTGCAAGGG TAGTGGCACA TTTTATTTAT  
 TTGGGATACC ATGCAGATGC AACCTAGCCC CATTCTTTAT GCAAAGTAGA TTATCCGTGC ATTTCTTCTG CATTGNTAGT  
 GAATCCTTAC TGGGNCAC TCAITCCATT TGGCAACAAT CTTTAATGNN CAGGCAATAT ATAACATTGC TGAAGTCTCT  
 TAGCACTAA

SEQ ID NO:662: (Length of Sequence = 340 Nucleotides)

TTTTTTTTTG GCAGCCTTGT AAGGAGAACT TCACCATTTT CCAGCACATC CCTATGTGTG CGCCTATTTT AATGCACCTC  
 TCTGAAACAG AGACCTTTTT GTTCACAACC ATAATAAAG CTGGAAAGTC AGTCTTCAGG CAAGGCGAGG GAGGAAAACA  
 TCCCATTAGA ATTTTTTCAG GAAAGACTTA TGGNAAAAAA TATCTCTCTC CCACCTCCTT TTATCCCCAT GAGACACAGT  
 TTCCCCTGT AATCAGGGTA ATATGCATTT NTAAAGNCTG ATATGTGATA CATTATGTG ATGGCAAAGA TAAGTCTGTC  
 TTGCATGCAG GGTACTAGAG

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SEQ ID NO:663: (Length of Sequence = 325 Nucleotides)

CACAACAATT CTATGAAATT AGCTGGGGAG ATACTGTCTT TATTTTTCAC AGCTGAAGAA ACCAAAGCTT TGGGAAGTTT  
 GTGACTTCTC TGAGATCACA GCTGGTGATA GAAGGAGCTG GGACACGCGC TTGGGTGAC TGGCTTCTGG TTTTGGTTCT  
 CTGGCTTCTA GTGCTGGAAG AAGCCCTCTC TTCCCTTCT CTTTCTCAG TAGCATCTGA CTCTTTTCAT AAGCAAACAG  
 CTGTATAAAC AAAGCCCCCA TTTTGGTCAA GCACAGGGTG AATGTGATAT TTGTTCCAC AACCTTATTC TNCCTCAAC  
 AGCCG

SEQ ID NO:664: (Length of Sequence = 300 Nucleotides)

TGTCTGAGAG AGATGATGTT TCATGGGTGA TGTCTCTGGA AGAGATTGGA TAGGACCCAA GCACAGAGCA AGAAATTGGC  
 TTTAGGCAAG TCAGATTGT CTATACTAG TTAGGAGTAA AGAGAAATGG ATGATACAGA TGCAGCTATG TTCTAGGAG  
 GGAAGTGGAG GGAATTTCTG TGTGATGGCT TTAGTAATGT AGGCAGCAAG GTCAACTACT GACAGTGAGA GGAGAAATTC  
 GGGGAGGCTG GTCACAGTTT GAAGTAATAG GTCATGGGGA GGCAGATGTT TGTGGGTGGA

SEQ ID NO:665: (Length of Sequence = 327 Nucleotides)

CAAATAAGAA CCCAGAGAGA GGGAGAGATT CACAGACAAT AGCTTAAAAA GTCTAGAAAT TATAGACCGA TTGAGGTCAG  
 CAAGAAACAA ATTATTCAAT ATATCCCTG AGGGCTAGAG CCAGACTTTC CCTATGATT CCAAATATAC TTGCGAGTTT  
 CATTAGGGTG AAAGGCAGTG CAGTCTCATG AGTTCAGAAA GTAAAGGTTG TTCCTTAAAA TTTAGATAGA CTTGACAACC  
 ACTTAGGATG GCATTTTGGC ATTCTGTCCC TGCTCATCAA AGAAGTTGCT CAAATTTGTG GGTAGAGGA ATGAGGAGCA  
 AGAAGTA

SEQ ID NO:666: (Length of Sequence = 319 Nucleotides)

ATTCCCAAGG AGAGGCTGAG ACAGAGAGGC TTGAGCTGT TCCTCAGCCC CCTACCCTA CTCCCTCCCT ACTGTTGATC  
 AGGCTGGTCT CTAACCTCG ACCTCAGGTG ATATGTGTGC CTCAGCTCC CAAAGTGCTG GGATTACAGG TGTGAGCCAC  
 CATGCCGSC CTGGGTTTAA TCTAAGGTC TTTGTGTGC TGTCCATCT GCATGAATAC ATTNCTTCA TTTACTTACG  
 TCTTAGCTTA AATGATACCT CCTCTCTTT CCTACTGCCA TTATCTTCCC TTGTCATCC ATACTCAGAT TTCATTGCA

SEQ ID NO:667: (Length of Sequence = 288 Nucleotides)

GGTGGCAGGC TGCTTGCAAT NCAAGCCAG GNGTTTCTG ATGGGTGAGG GTGGGGAGGC TGCACACCAC ACAAGGTCAC  
 CCTACTCTAC CTCTACCCA CCTACCACA GCGGTGAGCT CACCACTCCC CCAGGGCATG GGACTCTTGA TAATTCCAAG  
 TCCATGAAAC CCTACAATTA TTGCAGTGG TATGANTCCT TCTATGAAAG TACTTCCCCT GAGTGTGCCA GCGCTCAGTT  
 TGAAGGTCCC TTAAGTCTC CCCCATTAA CTATAATGGG GATATTTT

SEQ ID NO:668: (Length of Sequence = 212 Nucleotides)

TCNITTCINT TTCTATCTA TCINCTTAC CATGTGTCTT CGGGGCTGG AACATAGTAG ATGCTCAATA AATATTGATT  
 GAATGAATGA ATGAATAAT CTNCTTACAC CTCTCATGCT TCAACAGGG AAAGGCTAGA TTATTTAGAA GTCTTGTGGG  
 GGATAATAAT NAGCTCAGTG GAAGCCCTCT AGTTCTACT CGAGTTTCTC CC

SEQ ID NO:669: (Length of Sequence = 281 Nucleotides)

ATCTTTTCAA CCTATCAAT AAGATGTTAT GAAAGATTGG TTCTCTGTT TACAAGTAGT ATAGAATCTT TTTTGATCTT  
 TGACTCTGTG CTGCCATCT CATCAATGTT GTTGCTATTA ATATCTGTCC TTAAACTG GATGTTGGGA TCTTAGTAAT  
 GTTGCTGATA ATAGGATTTT CAGCAAACT TCCATATCCC TTGAAGATAT GGTAGTTTAT ATTACTATAT CGATAACAGT  
 TTTGCCTGTG GAGATTGAC TAGTTTTAGG TGTTTGGAAG C

SEQ ID NO:670: (Length of Sequence = 234 Nucleotides)

AATAAAGTTG GGATATTGA TTGTTTTCTT TTCTGATCTT TATGCTGACT GCAGTATCAG ATACCATTTT ATTGTTTAAA  
AATCTTCCTT TTTTTTTTTT TTTTTTTTGG CATTTTGCTC TTTTGTGATT GTTTCAAAGT CAAGTTGATG GCCNCAAAAT  
TCCAGAGGCT AAGCAATGCA GAAGTTTCAT CTACTGGCAG CTAGTTTTAT TTCTTAAAAA TACATTAAAT TAGG

SEQ ID NO:671: (Length of Sequence = 252 Nucleotides)

CCTGAAATGT AAATTGTTTT TAATATATTT AAGAGCACAC AGAAGTCTTG ATTTATAAAA AAATAAATAT ATAACATGAC  
AAATTTACTG ATGATCCTGG GGCTCTGAGG TCAAACTCTT TAAATGATCA GTGAAAACAT AAAACATCCA TGATCTGTTA  
ACACACACAG GGGCATATTC CAGTTGTAAA AAACAANTTC CTTGAAGGCT CAGNACGTAC AAAANTCAGT NTTINTGGCA  
GAAAGCACAT CC

SEQ ID NO:672: (Length of Sequence = 366 Nucleotides)

CCATCCAACCT ACTTACTCAA TCCTCTTGAA ATCTGCCTTT TGTAATGTAA CTGATAGGCC AGCGTTTTCT TTCACTGTGG  
GAAATAAAGG CTACTTGGTT GCTTTAGGGA GGGCAACAAT GTCAGCTGCA TAAGCAGCAA GAATATTATA TTTNATTA  
AGTCCACCTT TAATAAAGAG AGAAACCTTA GGAAATGGAA AGAGGTGTCT GTTTTATATT TCCTTTGCTT TTCAACCATT  
GTTTAGACAC TCTCCCTTCT AGTGCTTGGA GAACCTTCAT GGAAACTCTG TTCAGGTTCT TGACTCTCAG CGACANATGT  
GGAGGTCTTT GTGGTCTTAG CTCTCTAGGC CTGAGAATCA CATACA

SEQ ID NO:673: (Length of Sequence = 349 Nucleotides)

CCTCCCATCT TGGCCTCCCA AAGTGTTAGG ATTACAGGCG TGAGCANCCA CACCCTGCCT GGTGTGTGAC TCTTTTAAAT  
ACTAAGTTTT TAATGTAAAA TGCTGCTTTT AGATACACTG TAAAAATACA CCTATCAATG AGTTTTTTTA TTAAAAACAT  
TGCAATTGTA CTAGNCTTTA AATACTAAGC AATAATTGAG GCTTCAATGT TGGTTTATAG TTTTCTCAAT TCTTTTCATT  
AATACCTCTG TAAATGAAG CAGTTACTTC CATTTTCTG AGGTGAGATA AGTGCCCTGC ACAAATGTTA TAGGNCCAGT  
AAGTGAGGAC TGGAGCTCTG GATCCTAAT

SEQ ID NO:674: (Length of Sequence = 256 Nucleotides)

GCACTTTGGG AGGCCGAGGC AGTTGNTCA CCTGAGGTTA GGAGTTTGAG ACCAGCCTGG CCAACAGGT GAAACCGTIN  
TTGCTCTAAA AATACAAAN TTAGCCGGGC GTGGTGTGAG ATGCTGTAG TCCAGGTAC TCAGGNGGCT GAGGCAGGAG  
AATCACTTGA ACCCGAGGTG GGGCAGGNGG AGGTGCACT AAGCCAAGAT CGCGCCATTG CACTCTAGCC TAGGTGACAG  
AGTGAGACTC CATCTC

SEQ ID NO:675: (Length of Sequence = 292 Nucleotides)

GAAGTCATTT TAGACTCTCA ATTTTAAATT AATTTTGAAT CACTAATATT TTCACAGTTT ATTAATATAT TTANTTCTTA  
TTTAAATTIN AGATTATTTT TATTACCATG TACTGAATTT TTACATCCTG NTACCTTTC CTCTCCATG TCAGTATCAT  
GTTCTCTAAT TATCTTGCCA AATTTTGAAA CTACACACAA AAAGCATACT TGCATTATTT ATAATANANT NGCATTCACT  
GGCTTTTTAA AAAANTGTTT GATTCAAAAC TTAAACATAC TGATAAGTAA GA

SEQ ID NO:676: (Length of Sequence = 392 Nucleotides)

ATCAAAGATT GCAAACATTT ATTTTGATCC TGGACTACAG TGTGGGGATC ATTGCTATGT TGGCTTGCCT TTINCTATCCA  
AATCTGAACC CAAAGTGACG CCTGGTGTAG CCATGCAGGA AGATATGTGG GATGCTGACT GGGATTTGCA TCAAAGCCTG  
TTCAAGGGAT GGACAGGAAT AAAGGAAAT NCAGGTCATA GATTGAGTGC TATATTTGAN GTAAATACAG ACCTTCAAAA



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AAATATAATA TCAAAAATCA CTGCTGAGCT CTNCTGGCCT TCCATACTTA GCTCACCOCG GCACCTTGAAA TTCCACTTA  
CTAATACAAA CTGCTCCTCA GGAAGGANGA GATTACTTTA GNAAATCCIT GCAGGATGTT CCTGTCTATG GT

SEQ ID NO:677: (Length of Sequence = 333 Nucleotides)

CGCATGCTAA TTAAAGATA TACAGGAAGN GAAAAGTAGG AGTTAAGTTG GATGTTGTTA GAAGTTGGAT GTTAGTATTA  
CCTTCAGGAA CAGATCCCCA TGGCATGTCA CAGGCCTTAA TTATATACCT GGCTTTCTTA TTGTCTCCAC TTTATCATGA  
GGACAAGGTC TTGGTTTCAT GGGAGGAACT TCTCCATTGA AATAAATGTC TGCCATGTCA GCACCGTTTG TNCCTCAGT  
TTTAATATAA TGGACCATAT ATTAAACATN ATTAAACATA TTTTAAAIN TGGTGTCACT AGGTAGATGC CCCAGNCATC  
CTACTCCCT CAC

SEQ ID NO:678: (Length of Sequence = 359 Nucleotides)

AAGGAGACAA AGAGTAGATA TGGTATCTTG GGGACAAATG GCACATGAAA GCAGATTTGG TGCTTCTTTG GTAAATGGTT  
TGATAACCAA TCCCTAGGAG ATAAAGTTAA TGTGTCTTTT TTTTTTTTTT TTAANCGAAG GTCCCTTACT GGTCTGCTT  
CCATGAGTAG CCGTGACCAG GGGAAAAGGG AGAGTTTTTT TTTTTTTTTT TTTGAGAAAG AGNCTCACTC TGTCGCCAG  
GNTGGAGINT AGTGGCATGA TCTCGGCTCA NINCAGCCTC TGCTCCAG GTTCAAGCGA TTCTCNTGCC TTAGCCINCC  
GAGTNGCTGG AATTTCAGGC GCATGCACCA TGCCTGGCT

SEQ ID NO:679: (Length of Sequence = 339 Nucleotides)

GGTGGCACAT GACIATAGTC CCAGCTACTT GGGAGGATGA GGTGAGAGGN TCACTTGAGC TGGGAAGTA GAGGTTGCAG  
TGAGCTGAGA TCTCACTACT GACTCCAGC CTGGATGACA GAGTGAAACC CTGTCTCAA AATAAATAAA GANAGAAAGA  
NTATAAATAT TTGTATCAA TTTTCAGCTT TTACAGTCAA TGAACITAAG TCTTAATTTT GGTACAGAA TTAAATATTA  
ATATTAACAA TCAAGGCAAT GTAAAAGTAA AGTACAGTTG ACTGAAGCTG GGACACAGAC GGNAAAGAGA GTGAATGAAA  
AGAAGGATAC TAATATTCT

SEQ ID NO:680: (Length of Sequence = 356 Nucleotides)

CTGTATAATC AGGTATATCA CAAAGTCTAT AGTCTCTGAG ACATGGGTGA GTAGGTGTGA GCACCTGGTG AAACAGGTCA  
GAGGAAAAGC AAGTTGGCGT TGGAGTCAGC TGTCAAGAGA TAGATCCGTG ATGGTATCGA GATCACTACA GACAGGTGGT  
GGTCACCTAG TGTGTCCGC TGAAATTGG AGGGTTAAT TTTAATCCA AATACCATAG AAATGGATAT GAAAGATGG  
GTGACACATG CTGCACGTG GGAAGTGGGG ATGACCAGGT GCTTAGTTGC ATGGGAGAGG CCACAAGTGC TTGGCAATGT  
TTTCGTNGAC TTAGCCTCTC ATCTCAGGAA TTAGCT

SEQ ID NO:681: (Length of Sequence = 345 Nucleotides)

GGCCTGGTGT TTGGCTGAGG TGCACTAGGA CCCTGGCCG TGGTGTACTG GATGGCATCA GTTCTGATGG GTCANATGTC  
CATTCTAACA GGTGGTGCT GGAGAGGGAG CAGTTGTAA ATATCTTTAC TATCTCCCT NCTCCGGACA CCTAGATGCC  
CAAATATACA GCACGTAGTA TCGAGGCAGG CCTTTTGAT TGACATCAGA ATCAGGTTTG CAATGGAATA GGAGCTTCC  
TTCCTCCTGT CACTTTAGCC CCAGGCTCCA CTCANAGTC TGAATGCTC ATACCTATGG CAGGTGACCT TGTGTAAACAG  
NTTGGGGTTA ATGCCATTCT GTCCT

SEQ ID NO:682: (Length of Sequence = 302 Nucleotides)

CTCAGACATA TCTTTTTTC TCTAGCATG ATGCCACCC CAAGGTACTT ACACGTCTC AACACACCT TCCGGACAGC  
TTCTGGTAT CTGTGTGGC TATTCTGGT CACGGAATA TTCCATCTT TTGAGATAAT GGGGGGAAGC CTAGTAGGCT

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CTGGTTCCCTT CTGGTCTGAA ATTAGAGTAG ACTCGTTCTG AGTACTTGGC AAATGACTAT TTGATTCTCT GATTCCCTGG  
NCTCCATGCT CACCAGATGC ATAGCAGGGA TCTCTCTAG NCACTCACAT CCAATTTTCA GG

SEQ ID NO:683: (Length of Sequence = 329 Nucleotides)

GATTTTAAAT AGTTAAACA TTTTTTTAAA TCCATAAGTA ATTCTTACTC TACTCATTTA TACACACATA TACTCACATG  
TACACAGACA TACCTACACA CACACTTATA AATACATGTA TACACAGAAT ATAGTAAGGT CTMTTATCCC TTTTCAATGA  
AATAAATATT GTATTCTATA TTTAGNATAA ATAATGTGA AAAAGTGATT TTGGAGAAAG GTTGAAATGA TTGAGTCTTA  
AGTGTGTCAA TGTATAATCT ACCCCTTTCT AAACATCGTG TTTTAAGTAG TCATCTTACT TCAGAAATTA GAGGCTCAAT  
GTGTTTAGG

SEQ ID NO:684: (Length of Sequence = 281 Nucleotides)

AACATGGCTG ANTTGAGATT ACACTGCCAT GATACATTGN CTGACAGCAC TTCACATTTT CCTGAGTTG GGGACAGAAA  
TCACACTGCC CAAATACATT ATCTGATGGC TCTCATGTT TCCCAAAAGT TAGGAAAGGA GGTTCATAT ACATACATGC  
ACAAGTGCAT ACACACACAC ACACATACAC ACACACACAG TGCTAGATGA GATGTTGANT GNCATAAGGA AATGAAAGTN  
CCATCTCTCT NTNCCCTACC CCTGCATCT GTCCCTTAT A

SEQ ID NO:685: (Length of Sequence = 324 Nucleotides)

ATTTTAAATA ATTTTAACT AGCTACAAA TGTCAATCAC TTCACAACT GACAGAGGAG ACAGGAGGAA TTTAATATTA  
CATGCTATAA TGATATTTAT CTCACAGTTT ATATTTCATT CATTATATAT ATTTTITTA AAGGTTTCTT TATCAGCTAC  
TAAACATCTC AGCAATTTGG TGTCATAGC TCTAGATTAA GCAACAAAGN ATTGTACTGA TAACAAACCA CAGGGGAAAT  
GGTGGTTAGT AAGAGTCAGC CTTATAAAT TTACATCCAC ACTGTTTCA CAGCAAGNTT GCTCTCTCCA AAACGGTGGN  
CATC

SEQ ID NO:686: (Length of Sequence = 380 Nucleotides)

CGAGGAGGAG GAGGAGAAAA TTCCCCAGA TTGGGCGAGG CCGCACCCC ACATTCCGTC CTGTTTTGAG AGGAGGAGGG  
AAGAGAAATA AACGTGGCAG CGCATAGAAG GCCAGCAGGG AGACTGCTTT CCAGACACCT CCGGCCACA CAGCCGTTCA  
CCCCCGTTT TTTGATCCTT GGAAAAGGAA TTGGGCTCTG TTTTCCCTTT GGGCTCTGTG CAACTNCAGC TACAGTGGAA  
AAAAGCAAAC TGCTCTTGAT CCCAGGCCCT GCCTAAGCCT CAGCAGAACT TNAAGCCTA AACTTNAAGA GCCTCACCCG  
GACGAGCAGG CATNCCTTAA CCTTAAAGCA ATCCAGTTTC ACGGCTGGT TCAGTGAAT

SEQ ID NO:687: (Length of Sequence = 305 Nucleotides)

GACACTTCCC CTCTTTTATG GAAGCATAGT AAGATTTTTC CTTTATGGCG ATCATGATGG AGAAGTATAT GCTACAGGAG  
GNGAGGTTCA AATTGCAATG GAACCTCAGG CACTATATGA TGAAGTAAGA NCTNTGCCAA TTGCAAAGCT GGATAGGACA  
GTTGCTGAGA AAGCTGTTAA AAAATATGTA GAAGATGAAA TGGCAAGGCT CCTGATAGA TTGTCAGTAA CTTGGCCTGA  
AGGAGATGAA TTATTGCCTA ATGAGATTAG GCCTGCTGGA ACCCTTATTG GTGCGTTAAG AATTG

SEQ ID NO:688: (Length of Sequence = 390 Nucleotides)

GAAGTCATAA GGCCTAAATA TTAATCCAGT CTGTGACAAC GACAAGGTGA ATACAGCCA GTCTCTACTT CTCTGGCCTT  
CTGTTTTCTG CACTTTATAT AAAGATTGGG CAAGATGGTC TAACTTAAAT TTTATGATTC ACTAAGTTGA TTTTGTATGG  
GGCAGATTTT NCTTGATGA AATATTACA AATAAGNCAC TCAATAAAT CAGCAATGGG GTGCAGATGA GGAATACCGT  
TTCTACAGCA AAATATGGGT GAACCTAGTA AGTGTAGGNA CACAGAAGTT AATGCTGACC TCTTGATAG CATGTATGGG  
ATATTAAATC ATTTCTGCTC TTCCATTTCA GGGGTGAGGG AGGAACAGCT GTTCTGAAC TCTTTTAAAG

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SEQ ID NO:689: (Length of Sequence = 315 Nucleotides)

GATTTAAGTG TTAGCATTTT TAAACTTGAG ACTCTAACAG TAAAAATAAA GTAATCTGAA ACCTGTTTCC ATGGGTAAAA  
 CACTCTGCCT GGTATTCTTG TACACAAAT TTAATAATA TGTAATATC ATAAATGAA AATATCACTC CTTTCAATTT  
 CTTTGGCCTT CACAAATTCA ATGTGACTAT GATCCTTTTC AATAATACTT TCAATGACAT TGTGCTTCTT TAGAAAAATC  
 ACTTAAGTGT TAGCATACAA TAGTTAACAT TAGTCCTTTT ATTGCTATGG TATATGCTAA TTTTITTTAA AGGGG

SEQ ID NO:690: (Length of Sequence = 291 Nucleotides)

TTAAATACT CCATATATTT NAGAAGCAAT TGAAATGCA TCCATGTATG TNATTGAGC GTTACTAGAA ATTTATTTAT  
 ACAAATCCAT ATTAATGTGC TAATAAGTGA CAAATATATA TATAGTCATG CACTGAATAA TGATGTTTTG GTCAACGATG  
 AACTGCACAT ACAATGGTGG CCCATAAGA TTAAATAGA NCCAAAATTT CCTATGGCCT AGTGATGCTG TAGCCATCAT  
 AATGTGGTAG TGCAACCCAT TACCTTTTCT ATGTTTAAAT ATACAAATAC T

SEQ ID NO:691: (Length of Sequence = 451 Nucleotides)

TTGAGCATCC GGAATATGGA GAAGTAATTC AGCTACAGGG TGACCAACGC AAGAACATAT GCCAGTNCCT CGTAGAGATT  
 GGACTGGCTA AGGACGATCA GCTGAAGGT CATGGGTTT AAGTGCTTGT GGCTCACTGA AGCTTAAGTG AGGATTTTCT  
 TGCAATGAGT AGAATTTCCC TTCTCTCCCT TGTCACAGGT TTAAAACT CACAGCTTGT ATAATGTAA CATTGCGGGT  
 CCGCTTTTAA CTGGACTAG TGTAACCTCT TCATGCAATA AACTGAAAAG AGCCATGCTG TCTAGTCTTG AAGTCCCTCA  
 TTTAAACAGA GGTCAAGCAA TAGGCGCTG GCAGTGTCAA GCCTGAAACC AAGCAATACC GTCATGTTTC AGCCAAGCCC  
 AGAGNCCTAA GGTTTACAA CAACTATGG NCCGGAACCT CCTCAAGTTC T

SEQ ID NO:692: (Length of Sequence = 363 Nucleotides)

GATTTTNTGA TTATTGATAT TAGAATGTT TAAATTAAG ATATTAAAT TCCATGAAGC TGAGTGGTGA GCACACCACT  
 TTTATATTCT CTCATATAA CTTTGTTAT ATTGAAATG TTTTCTATA AAAAGTATTT AAGCAAGTTT AGGAAAGAAT  
 ATTGATAAAT GAAATCTAGA GACCATCAA AGCCAAATTC ACCATCACA AGTATAATTG TGTTTCAAAT ATAATTGAAA  
 TTGTGTGACT GTTGCAATT CTCTTTTGT TTGTGTGTA TGAAAGCATC TTAAACAGTT GCCTTTCAA GCTGTTATCT  
 TTGATANTAA CACACATTAA CCTAACATG TGGACTTCTG TTA

SEQ ID NO:693: (Length of Sequence = 269 Nucleotides)

TTAAGGGTCC CAAGACTGCT CTAACAACAA CACCATTTT CATAAATATG GNTCAATAAA CACTTATTCA TTCTTTATAA  
 TTAGACTCTA TGTTAGAAT TGTTTTAGGT TTATAGAAA ATTGAGCAGA TAGTACAGAA GATTGCCATA TACCCCTCAC  
 CCACAGAATT TCACAATTA CCTGCGATT AAAGTCTAAT GTTAATATGA TATATTTAGT ACAAGTAGTG GGATTATATT  
 GATACATTAT TATTAATTAA AATCCNCAA

SEQ ID NO:694: (Length of Sequence = 330 Nucleotides)

GGCATAGTCA CTTCCAGACA TGGTTGCCCT TCCATGTGGA GTAGGTCAA GTCTCCGTCC TCCCTGGCCA GGTGGAAGCT  
 CCAGAGGGAC ATGTTTCAGC TTAGTACAAG GTGGCTGACA CTACTCTCT GTAGGAAGAG GCTGGCTGGA GGTGAGGGCG  
 CCCCACTCAG CCGTACCCA TCAAGAAGTA TTCAGAAAGG ATGTCTCTGG CATCCACAAG ACTACTGGGC GAACCACT  
 GCAAAATGA AAAGTAGCGT ACACAATTA AATTGGTCTT AAACAAGCAA ATAATCCAGC CATTGGTGAC TCTGGGAATC  
 TAGAGTGCAA

SEQ ID NO:695: (Length of Sequence = 344 Nucleotides)

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CACTGTGACG GATGAGTGGG TATTTCTTTG TACCCGTGAGC TCTTTCATCC TACCTTGGTG GTCAAATGTG AGAGCAAGTG  
 CTTTGGGGCT CAGAGGGCAT CACTCCAAGC ATTCTGCATG GAGTCTGTTG TGGTGAATGT NCTTGCTGSC ATCTTGATCA  
 AGGACTTTGT CATCATAGC CATCAAATGC TTGTTGGTCC TTCTCAACCC TGTAAATGTTG ATACTTAAAA AACTGGAAAC  
 ATCCTGACAG AAACAGTCGA GAAAGTGGTT GTGTGAGCTC TGGTTATCGC ATTACAGTTA AAGTTGGCAG ATAGSTTCTG  
 TATTCAGTGC CCCATCAAAA ACAG

SEQ ID NO:696: (Length of Sequence = 324 Nucleotides)

CTTGAACGTG GCAGATAAGC ATTTTGATAT GCTGCTGGAT TCAGTTTGCC AGTATTTTAT TGAGCATTTC ACATCGATGT  
 TCATCAGGGA TATTGGCCTG AAATTTTGTG GTTGTGTTG TATCTCTGCT AGGTTTGTG ATCAGGATGA TGCTGGCCTC  
 ATATAATGAC TTAGGGAGGA GTCCCTCTTT TNCATTTGTT TGGAAATGTT TCAGAAGGAA TGTTACCAGC TCTTCTTTGT  
 ACCTCTGGTA GAATTTGGCT GTGAATCCAA TAGACACAAT AAAAAATGA TAAATGGGAT ATCACCAGT ACCTCAGAGG  
 AAAT

SEQ ID NO:697: (Length of Sequence = 341 Nucleotides)

AATTAATCAA TCAGCCATTT TGGTGGCCGA AATTTATAAG GCAAGTAATA CTTTGTAGTTT CTTTGATAGA CACCATGATC  
 AGAAACATAG TCTCTTTCTT AAAGGGAAAA TAGGAAGTCT TCTGAGTCAT AACAGATGCA TGCAATAATT TCTCTGAGTC  
 TTCATAAGAA ACACAAGCAA GATTTTCACAG AGGCAGTGGG ATTGAAGTCT AGTCTTGAGA AATAAGCAAT ATCTGAACAT  
 GTAGAATGCA AAATAAGGA TAAGCAAGTG CTAATGCCCA GAGGGGTAAT ACATATTAAA TANCANTAA CCAATTGCTA  
 CTTGTGTTTC TTACACTAGA A

SEQ ID NO:698: (Length of Sequence = 317 Nucleotides)

GCAAACCAAG AGAAGCAGAA GAGCAGGGTA AACCCCTGGT ATAATTGTG TAGACCCCA TGTCTCCTTT AGTCTGAGTT  
 CTGACATAAT TAAGTGTCTA TGAGATGTAC TGGGCCTTTC CTCATTGCTT TTTGATGCCA CCTCACTAAT GTAAACAAAA  
 CATTCAATTT TTATCCTTAT TTTTCTTAC AGCTGCTTAG CACAGTCTT ATGAAAAAAT GAAGCCTTGA AAATGGTATA  
 TCCTCTGAC AAAGCTAAGC CTGACAAGTT GGCTGCATTA CTTAGGAATT AGAGAAGAGC AAGGGCAGAT GGTGGGG

SEQ ID NO:699: (Length of Sequence = 385 Nucleotides)

ACCAGGAGAT GGAGGTGCTC TAGACTGTGA TGCTGGGAAA GGATTGTGGG CTAGAAAAAG GGCTCCTAG GGCOCGCATA  
 TGGGCCACTG GGTGGAAGAG GGGCTCTGAG ACCCTCACCC TGGAGCAGGT CATCACCCAC ACCGAAGAAT GAAGCGTGAA  
 TTCGGTCACG CTTAAAAATGT TGAATTGTTG GCAAAAGCCC AAGTTAATGA AATAGCATGG AAAATGGATG TGATGAGATT  
 TTTGAATTGT AATTAGATTG ACATTGTAC TAGTTATCAG TCTGATATAT CTTATAAATC AAACGTTGGG TTGATTTATC  
 TTTTATCACT TCTAGGNGT TACTCCTAAC AGTAACCTAC AAACCCAGCC CCAATCAGA GGCTT

SEQ ID NO:700: (Length of Sequence = 315 Nucleotides)

ATCAGTTGGA TTTGCAGAGG ATTGGAAGGC AGCACCAGGC AGGCTCAGAC TCACTGCTGA CAGGAATGGC TTTCTTTAGG  
 ATGAAAGAGT TGTTTTTTGA GGACAGCATT GATGATGCCA AGTACTGTGG GCGGCTCTAT GGCCTAGGCA CAGGAGTGGC  
 CCANAAGCAG AATGAGGATG TGGACTCINC CCANGAGAAG ATGAGCATCC TGGCGNTTAT CANCAACATG CAGCAGTGT  
 GCGCCAGGC TCTTCAGNT GGGCCTGATC CCNCAAGTGT GCTTACTNTG CTGACTGTGT ACTTATCTTC CCCAA

SEQ ID NO:701: (Length of Sequence = 387 Nucleotides)

GGCAGGAGAA TCGCTTGGGC CCGGGAGGCA GAGGTTGCAG TGAGCCAAGA TCGTGCCACT GCACTCCATC CTGGSCAACA  
 GAGCGAGAGT CTGTCTCAA AATAAAAAAT AAAAAAATAA GGTAGGTCTT TTCATCATTG TGTTTTCTAG CATGTAGCAC

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TGTAACCTCC ACCTACTAGT AACTGAAAAC ACGCATGTGG GAACATTGCA CAGATGGATA GATGCAGAGA TGAAAGAAGG  
 AAAGCTAAAA TATTINCCAC GTGAAAACCA TGCATCCTGT TCAGAAACTA ATTCTGCCTT CACGCCTTCC AGGAGCATGG  
 GAGGGGTGTC GTCCTGNNCC TTTTGTGGAT GAGGGGGACC ACATGGTATT TCTACTGAAA GAGTTTT

SEQ ID NO:702: (Length of Sequence = 397 Nucleotides)

CATCAAAAA AAAAGGAGCT AACTAGATGC TGTCAATAAG AGACTCACTT TAGATCTAGA GACACAGGTT CAATGTAAAG  
 GGATGGAAAA ACATATTCCC TGTGGAAATC CCAATGAGGG TGCTATGGTT TTGCATGTGG TTGTGCCCA CCAAACTCA  
 TGTTTAAATT TAATTGCCAA TGTAATGGTT CTGGGAGCCT GGGCCTTAAG AGATAATTAA GATGGATTAA TGTCTTTCCC  
 ATGAGACTGG GTTAGTCGAG ACTCTTGCAA AAGCATGTG TCGTAAAGTG GGTCACTCTC CTGTGCTG TCTCTTTTAT  
 ATACACTTCT TTCCCTTCT ACTTTTCCAC CCTATTATGG AAGCACCGTG AAGCCCTCAC CAGATGCCAC CACCATG

SEQ ID NO:703: (Length of Sequence = 374 Nucleotides)

ATACAGGGTT AGACCAAAGA GGAATTCAA TGAGGCTGA TGGATTATG GACCAGAACA ACAGAGGGGT CTTGAAGGAA  
 GGAAGATATA GAAAAGGCAA GGTGTGTTT AGAGAGGAAA TCCAGAGTT TTAGCTCTGG GAGGTGTAAT AATTTCAAAA  
 GAATAAGTCC AGGCCTGGCC ATGACATGGG AAGCTGAATC TCTGCAATGT TTTTCAAAT AGCATAATGG ATATCTTTGA  
 CTCCTACCCT GAAGCCAGAA AATATTAAAC TTGCATGAT AATCATACAA ATGTATGCAT ACCTATTTAT ACATACATT  
 ACATATTTTA TACTTATGCT TTCATATATT CTACGTGAGG TACAATATAC TCCA

SEQ ID NO:704: (Length of Sequence = 422 Nucleotides)

GGCAATGACA TAGAGATGAT AAGAAACAAC ATGGTTTGGT AGAGGGAACA TTGATTTAG ACTCTGCCCA TTTTLAGCTG  
 TATGACTTAC ATAAGTCATT TTGTGTCCAA GCCTCATTTT CTCCCATATG AAAAGTGAAG GGGTTGGATT AAATGACTAA  
 AATCCCTTC CAGCCCTATG AGCCCAATGT ATTATGATCT CTGCTTGTGTT TCTTCTTAA GAGGCTTCT ACTATAAAT  
 GTGACCTATT TACATTTTAA GTTGAAGTAG CCCACAATAA TGAATAATCA NTTAGATTT TCCTCATCTC CTTTGGGAGA  
 AATTAAATTC AAGCCTCTAT TCATTTGATG TTTTACAACA AGCTTCAAAG TTGGGCCATG GTTCATTCAC AGTTTTGATA  
 TTTTGAGGAC ACCAATAAAA AG

SEQ ID NO:705: (Length of Sequence = 229 Nucleotides)

GCTGCGGNTC ATAACAGCTG GACTCACGCC GNTGACAGAG TCTTGATCAG TCCTCTGGGA ACTAGACGTC AGGCTCACAC  
 CACTGTCTGC GCTGATCTGG GNCCTTTTCT CCTCTGCTC ACCAAGGTCA AAGACAGGTT TGATTACTTC AGGCCTCTGT  
 TTTTCCAAAG NTTTTTGCTT TNNCACTTCC TGGTGCTGT TCCACAATTC AATAGATGCT ATAAAATTT

SEQ ID NO:706: (Length of Sequence = 255 Nucleotides)

GAGGACTGTN TACCTCAGTC CTCTCTCTAA ACTCCTCAGC CTCCCAACAG GGGCTCTCTC ACCTGGGTTT TGAGTGTGTA  
 CCCCTTTTAG AGAGTGAGAT GCCACCGGG CAGCACTCGT TAAAGCTGGC CAGCACGAGT GACTAAGGGG AGAGAGCATG  
 ACATAGACCT GGGTGGCAAC GGGGACCTCT GGAAGCAGGT GGGAGTAACA NAGGAGAGGG CAGTNGAGGG TAGAGGAAAA  
 GGACCTCCAG AGGTT

SEQ ID NO:707: (Length of Sequence = 324 Nucleotides)

COENGAGTGT GCCACTGCAC TCCACCTTGG TGACAGAGTG AGACTCOGTC TCCAAAAACA AAAAAACAA AGTTGAACTA  
 TAACTGAAT TCCTCCCAAG GTTAGTTTCT CCTATGCCCT GGAATGAACA AGGACAGCTT GGAGGTTAGA AGCAAGATGG  
 NGTCAGGCCA GATCTCTTTC ACTGTTAACA TTTTCTCAGT TATAATTTTT GCAAAATGTG TTTTCAGTCCC TGCATCCATA

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ATACCTAGAA ATTTTGATAA ATACTTGTTA AACAAACAAA AATAAAACAT CCACAGCAAG GANTCGACTA TAAGGCGTTG  
GTGG

SEQ ID NO:708: (Length of Sequence = 325 Nucleotides)

GGGCTCATAAC ACAGTTTAT TTCTGTGA TTTTACAGAC ACTCCATCCT GCAAGCCCAT TCCCTTGGA AACCAGAAA  
GAGTGGGCAC AGTGCTCCCT AGAGGAATAG AGGGGACAAG ATGGCTGCCA GGGAGAGGC AGTTGAGGCA CTTAGGGATT  
TACTCCGGCC CTGATGGAAG ATCTGGTGCC CAGGGTAGGG GGAGAGGGCC TGGGCTGGGC TGGAGCCTCC TAGGTATTTC  
CCAGAAGCCC CTTAGGAAC TGTACCTGG ACTCCAGCAC CACCCCTCGT CATGTTGTCA CTTCCTGTGG TGGCGGGAGC  
GCAGG

SEQ ID NO:709: (Length of Sequence = 264 Nucleotides)

GGGCCCGGTT GCATGAGGCA CTTTGTCAAA ATGAGCAGAT ACGTATGAGC ACTGAACTCT TGAGTGAATC AACCAGAACT  
AAGACCCAGA TCCACGCACT CAGGAATTG CTCTGAATTT CAGTTTGACA ACAGAGAAGT AGAATATTTT TAATTAGCTA  
ATATATATAC ACATTTTITA ATCATCCAAA ATTACAGGCA AATCACTTAA GGTCCCCAGC ACTTTACENT GNAAGGTCAG  
AGAGANCCCC ACAAAAAGG TGTT

SEQ ID NO:710: (Length of Sequence = 366 Nucleotides)

ATTTTATTA TATACATATC AGTACTCACA ATACGTGCT TATTTAAGAT GGCTGTTTAT AAGTATAAAG CAGTTTGAGC  
AACACTGATT GTGCATTATT GACTTCAGA TGAAAAATCC TTACATGCGG AATCAATGTC TTTTAAAATT TCAGATAAAG  
AATTINCATT TGAGGNGACA TACAATTGTA AGTGCTCATT TTTTGTCAT TTTAAGACAC CATTATGTGT AAGANGGATT  
AATTTTNCCA TAAAAITACA AACACCCCTC ATGTCTTGAC ATTACATGG AAAGGGCAGC ATAACCATT AATCATCCAA  
ATGCATATCA GAGCAAACTC CTAGGGCCCT TAGGTGTGAG GGTGGA

SEQ ID NO:711: (Length of Sequence = 216 Nucleotides)

GAAAAGCAGA AAAAAGTGGG GAAGATTTT TATCTTGAAC TTGTGAGCTG GAGAATTACC ATTAGTAGCC CACTAATAGG  
TTATGGCGCA TGAGTCCCTT CATAACACAC TGAGAGCCAC TTTTGACACT CCCAGAAAAG GCAGGTTAAC AAAACCCCTT  
GATGGAAGT TAGACCCCTCA TTGCCAGTG TACCCAAGCC TCCTTGAACC TTGCCT

SEQ ID NO:712: (Length of Sequence = 276 Nucleotides)

ATTTTTTTCC CATAGCACT ATCACTCTCT CATGTGTAC CTGCTACACT AGAATTATGA CCCCTAAGAG GGAAGAGACT  
ATGTCAGTAT CATTGATTCT NATTAACACC ATTATTTAGA ACCATGCTTG GCTTAAAGTA GTAGCTGCTC AGTAAATATT  
TATCTATGTG TGAATTTTGA AGINCTTCCT TTATATTGAN TTAAAITTAG TCTCTGTGT GCAGCAGTCT GGGTTTGTCT  
TATGTTGAAA TACTTATGTA GACTTCTACA TACATT

SEQ ID NO:713: (Length of Sequence = 354 Nucleotides)

AAACTTTTACA ACCTGCACAT TTGTTATGCA TACTAAATGG TGTGTTAAAA TTAGGGTTTC TTTGCCTCTC TACTACTACAC  
TAATCTGCCT AAAGGTGGTT GTTTCATATT TATAATGCTA ATTATCATAC CTACCTACTT TAAATTTTAG GTAGAAAATT  
ATCTGATTTA AATACAAACA TATTTTCTC ACATTGAGTA ATATGCATAA TGTAGTTCCA AATGTATTTT ATTACTATAG  
TCACAATATC CACTAAAAA TTACGCTATC TAGAATTGTA CCANCCAAAA TCTCGTATTG GCAGATCTTG ACAGGCTGGA  
CCTGCAAGNA TGTGGCTTGG AATTTTAAAC CCAT

SEQ ID NO:714: (Length of Sequence = 349 Nucleotides)

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CAGTAATTCT CTTACATCCT TCCCAAAAAT CAGTGTCTAG GGACTAGTTG ATCTGGATGA GTTATACATG ATATTTGACT  
 TINCATAAGT AGTGGAAGGT TTTACTAAGT AAAGATCTGA GTTCTCTGGT ATCTGACGTT TGTATACAGA TGGTGTCCAT  
 TTGCTCAACC AGACAGGAGT TAACTTGTAT TAGAATTGTT TTINCTAAAG TNAATGTTACC TGAGAAATTA AGGACTGCAC  
 CTGGTTTAAT GTTGCTTCAC TTATCCCACC CTACAGAGAC CAGCAAGGTT CTGCCAGGCC TCGAGCATCC AAGCATGATT  
 TTCTGTGAC AAAATCTAAA AATCCAACC

SEQ ID NO:715: (Length of Sequence = 302 Nucleotides)

ATATTTGAAA AGATCTTCAC CAAAGATATA TGGATAGTAA GTAAATATAT GAAAGGTTTT CACTGTTAAT GATTAAAGGA  
 AATGCAATCT TGTACATGAA TGTTTATAAC AGCATCATTC ATAAGAGCCA AAAGGTAGAA ACAATCCAAA TGTTTCATCA  
 CTGATGAATG ANTACACAAA ACATAGTATT ATCTATATAA TGGAAATATTA CTTGGCCATA AAAAGAAATG AACTGGGCCA  
 GCGCAATGA CTTACGCCTG TAATCCCAGC ACTTTGGGAG GCTNAGGTGG GCGGACTGCT TT

SEQ ID NO:716: (Length of Sequence = 314 Nucleotides)

GTATTTTTAG TAGAGACGGG GTTTCACCGT GTTAGCCAGG ATGGTCTTGA TCTCCCTACC TGTGATCCG CCCACCTGG  
 CCTCCCAAAG TGCTGGGATT ACAGGCGTGA GCACCTGCGC CCCACCCCAT TTGGGTGTA TCTCAGCTCA CTGCAACCTA  
 CCCCTCCCAA GTTCAAGTGA TTCTCTACC TCAGCCINTT GAGTAGCTGG GATTACAGGG GTCTGCCACC ACGNCTGGCT  
 GATTTTCCTA TTTTINAGTTG AACTGTCATT TCACCAGNT GCCAGGCTG GTCTCGATCT CCCTGACAAG AGGG

SEQ ID NO:717: (Length of Sequence = 279 Nucleotides)

ATAAAAATGC TACAGATTTT TGTATGTTGA TTTTTATCA TGCAATTTCA CTGAATTTGT TTTTCAGTGA TAACAGTTTT  
 CTTATGGAGT CTTTGGTTTT TNCCAAATAC AAGATCATAT CATCTGCAAT CAAGGATAAT TTGACTTCCT CCTTTCCAAT  
 TTAGATGCC ATTATTTTTC CTCGTGCTG ATTGCTCTAG CTAGGATTTT CAGTACTATG TTGAATAACA ATGGTGAAAG  
 TGGGTATCCT TGTCAATTC CAGGTCCTG GAGGAAAGG

SEQ ID NO:718: (Length of Sequence = 161 Nucleotides)

AAGAAAAAAA CATAAATAAT ATTAGAAATG GAAAAGTTAT AAATCAACTA CAGCAAGGNT TTAAACTAT TATGAAACAA  
 ACCAAGTAGA AAGTAGATCT GCCAAACAAA AAAGGAAAGA NACTGTTTTCT TTCATAAATA ANTGACAATG GGGGAAAAAG  
 A

SEQ ID NO:719: (Length of Sequence = 220 Nucleotides)

GACAGAATTT TTTTTTTTTT TTTTTTTTGA GACAGAATCT CGCTCTGTCA CCCAGGCTAG AGTGCAATGG CGCAATCTCG  
 GCTCACTTCA ACCTCTGCTG TCACAAATAA ACATCAGTAA GAGCCAGCAG TTGCTCTAGG ATCTCAGTCA GCAAGCTTGG  
 GGGCTGTGAG GAAACCAGCA GTCACCTGTT TCTCCCTCTC CCAGCCAGG GCTGACCCCT

SEQ ID NO:720: (Length of Sequence = 347 Nucleotides)

AGAAATGAAA GCTACATTAA CGAAAAAGGA ACTTAGGAAT GAGGTCATTA AATATAACTA ACTACATTTT AAATACGGAT  
 ATCATATATT TCCTGATTAG TATCAGGTAA ATATCTAGAC TCCTATCTG AATTCCGGTC TCAGATAAAA AGGTCAGAGA  
 CAATTACAAG GAAGATGCTT CATATTATCA GGTCAGTATA TACCTAATTA TGTGCACTGG AGAGTAATTT ATTCTTCATT  
 ATCAATTGTA AACATGTTTT TTTACATTTT TTGTAGTTGT CCATAATGTA AGCTTGTGGG TTTGATTATT GTTTTCACA  
 CTGGATCCAG CTGGTTTAAA CCTATTT

SEQ ID NO:721: (Length of Sequence = 313 Nucleotides)

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AAAAGATTTG AACAGATAAT TCATCCAAAA AAAATATGGG TGGGAAAAAA AGCATGAA AAGATGCTCA ATATCATTAG  
 ACATTAAGAA AATATAAATT AAAACCACAA TGCAATATCA CCTCGTATCT ATTAGAATGT CTAATATTAG CAAGACTGGC  
 CATATAGAGT GTTGGTGAGG ATGTGAACAA CTGAACTCA TACACAGTGC AGGTGGAAAT GTAAATGATA CAATTTTTTT  
 GGAAAAGAGT TGGCTGTTTC TTCAAAGTT AAACATTACA TCTGCCATAT GNTCCAGACA TTCCACTCCT AAG

SEQ ID NO:722: (Length of Sequence = 266 Nucleotides)

ATCGTGCCAC TGCACTGCAG CCTGGGCGAC AGAGGAAGAC GCCATCTCAA AAACAGAAAA AAAAAAAAAA AAAAAAAAAA  
 AGTGCAGCTC TCTAATGGG CTCTTTTACT TACTATTTAT ATAATAAAG CCACGTTCTT AGGCTGTATA ATGGGGTTAA  
 TCATAGTAAG TACCTTGTA AGTTACTGTG ATAACCAAT AAGTGANCAT AAGTAAAGCA TTTTACATGT GTGCAGCTTA  
 ATAAGTTGGA GTTGTGACTA TTATTT

SEQ ID NO:723: (Length of Sequence = 370 Nucleotides)

ATTATTCATG AAATAATCCA TGTAACATCA CTTAGCACTG AGAGTTAACA AAGGCAAATG TTACCTGAAT AGGAGGAAAC  
 AGAGGAAGAA CAACGAGGTC TCTTTTATCT ATGCTAAGCT TTGTCTGAAT AGGAGAGAAA TGTGTGGCCT GTTGGTGAAT  
 TTATGCTTT GTGGTAGTAA TGGATTYCC TAAAGCTGTT TCCCTCTGAT CATTATAAT CCTGTACAG CAAAGGACTA  
 TTGTCTTTG GTATGAGTAA ATAACCTGT TGGAAAGCACC GCTTATCTTC AGACCACAGC GCATACTTCT TACTGGAAAA  
 TATAATGCAG GTGCCAACAC CCAAGGGCA TGACCAGGGG TTCCCTTCC

SEQ ID NO:724: (Length of Sequence = 478 Nucleotides)

GGACACAACCT GAAGTGTGGA AGAAATGAAA GGGCGAAGGT GTGTTTTGAG AAGGCTCTGG AAGAAAAGCC CAACAACCCA  
 GAATTCCTCT CTGGACTGGC AATTGCGATG TACCATCTGG ATAATCACCC AGAGAAACAG TTCTCTACTG ATGTTTTGAA  
 GCAGGCCATT GAGCTGAGTC CTGATAACCA ATACGTCAAG GTTCTCTTGG GCCTGAACT GCAGAAGATG AATAAGAAG  
 CTGAAGGAGA GCAGTTTGT GAAGAAGCCT TGGAAAAGTC TCCTTGCCAA ACAGATGTCC TCCGCACTGC AGCCAAATTT  
 TACAGAAGAA AAGGTGACCT AGACAAAGCT ATTGAAGTGT TTCAACGGGG TGTGGAAT CCACACCAA CCAATGGCTA  
 CCTCTATCAC CAGATTGGGG TGCTGCTACA AGGCAAAAGT AAGGCCAAT GCAGANTACA GGGGATCTG AAGCTAGT

SEQ ID NO:725: (Length of Sequence = 356 Nucleotides)

GACAGAGGAG AATAAATGGA ATAACCTAGT TTTGTGAAAG ACTCACAGTA TCACTTGGTT TCTGGACACG GTTCGAGACC  
 TGGCTGTGGC TTGCTGTGGC CTTGAGAGCC ATCCACAGC AGCAATGCTG TTGGACCCIT TGGCTGGGAC CTTCAGGACC  
 CCTGCAACA GCACTGTGTN CCTAACCTGC TGGCATGATG CCCCCTTNTT GACAGGGCTG CATAAAGGC CAGCGACAAG  
 TGGCAGGCAG TGACGCCAGC CTGGATTGTC TGAGGGCACA CGCCATGCTT CCTGCAGTGC CAGTGCTCTT CTNGGTCCAC  
 TTTGCAGCAA GGATAGATGT GGTTCAGAT CCAAGA

SEQ ID NO:726: (Length of Sequence = 387 Nucleotides)

GTGGTAGAGT AAATCCTATT ATATCGAGAT ATTGGTCAGG CAAGAATTTT NCTTTTAAAA TAATTTATTG TAAATGAACC  
 ATAAAAATTT NACCTTTGTG CCATCTCTA GGCTATAAAA TAGTCTTATA AAGAATCAGA TTGTTAAGAG TATATGAAAT  
 GTGGATATGG ATGTGGAAGA TCATAACGA GGATGATGAA AGCACATTAA GAAGCTTTCT GATGGGTACA AAAAATAGAA  
 TGAAGAAGAT CTAGTATTTG AGAGCACAAC AGGGTGACTA TAGTCAACAA TAATTTATTG TGCAATTTCA CATAACTAAA  
 AAGTATAATT GGGATTGTAA CAGAAAGGAT AACTGCTTTG AGGTGATGGG ATACCCCAAT TTACCCC

SEQ ID NO:727: (Length of Sequence = 348 Nucleotides)



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CCTTTAAGC AGCGGATCCC CTGGTCCCCA CCCCCAACTT TATATTCATT AGGCCTGAGG TGGGGCCTGG GAATCTGGAT  
 TTATAZATTG CTCCCCIATG ATTCCAATGC CAGTGGGTTT TAGACCACAT TTTGAGAAAC AGTGCTGTAA ACTGTTTTCC  
 ATTTGCAGTG AAGGAAAATG TAGGGTTTTGT GTCTGAAAC TATGCAGAGA AATTGAATAG TATTINAGTC TAATCTTGCT  
 TTTAALTAAC ACGGAAATTT TGAAAGTCGG CTTTAGGGAG TTCCAGAACC TGTCCATGAA CAGCAACAAG AAAGATCCCN  
 GTGTGAAAT GAACACTGGT TGGTAAAA

SEQ ID NO:728: (Length of Sequence = 305 Nucleotides)

TGTTTATTA TAATCTTATA CAGTCTACAT AAATTGGAAC TTGTATTAT TTGGGTTTCAG TTATAACATA GCATAATAAA  
 AATCAGCA CTGGTCTCT GAAATAAGC AGGCAATCAC CATTCAATAA ACACACTTGA TTTATTTTGT ATAAAAGGGT  
 TAAGTTTACA ACTAACTTT TATAAANGT TTAGCATGAA TAAGTACATC ATTACACTTT TGAATGCAGA AATAGACATC  
 TCTGCCACTA TACAAGAAAA CTCTAATTAA AGAGTTCACA AGGTTTCACT CAAATAGATA TATTT

SEQ ID NO:729: (Length of Sequence = 383 Nucleotides)

CAGACATTT ATTTTCTIAT TTTCCATGAA GAAGGAGAGG GACAATTTTA GATTCACCAG TGTGCAGGAC AAATTCCTAC  
 TTAACCTATA GAGGAGCAAA CTTCTTCAA ACACATTACC AATACAATTG TAATACTAAG AATCAATACC ATAGTTCTCG  
 ATGTAGCATG ACTACAAATT GTCACAGTAG ATTTTGGATG ACTTTACCAT AGCCACACTT AATGAATTAT TATTNATATT  
 NCTATTTGTA CTTTAATAAA ACTATATTTT AAACTTTAAA ATTGTCATTT AAATTAATAA AGAAAATGAG TAGTTCCCAT  
 AATGAATCCA TAATGTTANG AATTGCTTT AGCAAATGAG GACTATATTC ACCTANGCTT TTG

SEQ ID NO:730: (Length of Sequence = 311 Nucleotides)

CTCTTTATT CCTTTAACTG CTTAACAAAA GAAAGAGTCT CCAAAGTTTA AAAAACCTTT GAAAAATATA CAGCTTGATA  
 TTATTACAT AAAATATGAN TCCAGGTTCC AATATCAAAC AAACATTGCT ATGTCAGAAA CACAGTGGAA GGCAGGAACG  
 TAACTCACTG CCTTTTAGAT GCAAAGACTA ATAGACACGT TCTCCNATCT CGACTATCTT NGTTACCTGT TATCTCANA  
 ACATAATTA TTANGGCACC TENGAGGTTG GATGACTACC GAAAATGGNC TTCATACCTT CTGTATGATT A

SEQ ID NO:731: (Length of Sequence = 349 Nucleotides)

AGGGAATGC ACAGAATTCT ACTAAAATAA CAGCAAAATA AGAGAGCATG AATTACATAT CAAATTATTT AAAGCAAATA  
 ATTAA-CAAA TTTCTGGAAC AGACAGAAAG CAGATGAGTC TACCAAGAAG GATAATAAAC AATGACACCA GAGAAAAACC  
 ACAACCTGAA AACTTAAGAA AACTGCCTAA GAGGTGTGAG CCAGAGCTCC CAGGAGCCCT ACAGTGCTCC AAGCTCAGAA  
 CTGGCAGTA TCAAAGTCAA GAATGCTATG GGGTAGCTAG GCTCTTGAC TTTCTCTTCT CTCTCCATTC ATAGACAAGA  
 AAGCAATCT ACCTTTAGGT GGCTAGAA

SEQ ID NO:732: (Length of Sequence = 370 Nucleotides)

AAATTGTGTC CTCTAGCCTA GAAGCAATCA AACTCCAAC TGGTCTGCTG ACTGANCTAC GCATGGATAC GCCATTCTTC  
 TGAGG-CCCT TAGACCAACC CCAGGAGGAG CCTGACTTC TGTCCCCAT TTATGCCCC TTTTCAAGCA GGAAGTAGCC  
 AGAAAGAGTC ATTGCCCAA ACCACCTAAC AGCAGTTGGG GTGACGTCTC CACAGGGGGG AAATGTTATA GGAGTTATTA  
 AGAAATATC TTAGGCAGAT AGAGAGCAAA AGGGTCCCT GGGAAATTTT TGTTCCTTTT AAAGTAGCTG CAGAAATGTT  
 TCTGCTAG CAGGAAAAGC CCCAGCTCTT TAAAGCTGGG GCCAGCAATC

SEQ ID NO:733: (Length of Sequence = 357 Nucleotides)

TTTTTGGTG TGTAGAGACA AGGTCTTGCT ATGTTACTAA GGCTAGAGAT CCTTTTAAAA TGTCTTTCTG CTAGGTTGTT  
 GGGCC-TCAC CTCTCCTTTG TTTCTTCTC CTCTCCAGC TTCTCTGGAT TCCATCTGTT TCTTATACTG AGAAGTTTGC

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TACCTAGCTA GCCCTCAACC TCTTTGTTTT ATGAATGGAA AGGCTGGGAC CCAGACAGGG CAAGTGACTC ACCCAGTGT  
ACAGAGCTGT TAAATGGCAG AGCATGATTG AATCGGGCCA TGACTACTTT CCTACATGAC ATATTGAAAC CAGTTTGAGG  
CCTCGGTTTC CTCTCTNGCA AAACAGAGAT ACTAATG

SEQ ID NO:734: (Length of Sequence = 374 Nucleotides)

TGGTGAAAGA AGAGAAGGAA ACCTTGGTCT GCATGGCACT TGGTACTTTT GTATTGCCTC CATGCCCTCC ACTGCAGCTC  
CTGCCCTGCT CTGTGTGCAT CCTCATGAG ACTCAAGACA GATAACCTCT CCTTGCCCTT TCATGTCCCA GCGCTGNTC  
TTGGACTCAA CCATCCATTG CATCCCCATG GAGGATTCTG CCAGTCTCA GGAATCAGGA GCAACCCAAG GATGTCCAG  
GGTCACAGGA AGACTTGTG AGGGGACCCA CAGGGGTGCC CACAAATTAT CAGTCCATGG AGAAAAGTAG AGAGGGAGGC  
TCAAGGACCT CAGCAGTAA GGGACATTTT GAATCTTACA AGTCACGGTG GGAT

SEQ ID NO:735: (Length of Sequence = 348 Nucleotides)

CCACGCGCTT GGAGAGCCAG CCTGCAGGG TGGCTGGGC GAGCCAACT GCGTTCCTGG TGCAGGGCTT CCGGTCTCCC  
TAACAGACCT TATACGCTGA CCGGCGGCCG CCATGGCAGT GTCTCTTTGC TCAGACATCC AGGAGCAGCC ACATTCGTCC  
AACAGCGGTC GCTCCACCAA TCCTGGGAGA AGCGAATCGT TTTCTCCCGG TGCCCTGTCA GCGGCTCATG GTGCCAGAG  
AGGAATTTTA GTGSCAGCAT TCCGGCTGTC ACGCCACCGA AATTGCCAGG NCACTCCAAG TCAGAAGGAC CACCAGGAAA  
AGTCAGGAAG AGAACCACCC ATCAAGGT

SEQ ID NO:736: (Length of Sequence = Nucleotides)

ACACTCCTGA CCTCAGGCAA TCCTCCACC TCAGCCTCCC AAGGTGCTGG GATTACAGGC ATGAGCCACT GCGCCAGCC  
TACACACACT CTTAATAGAA GAAATGAATA ATCAAAAAAT ATTATGTGTG GAAAAATGT TTGAATCTTA TTTTAAAAAT  
AATTAACGNT TTCAATAGGC ATGTTGAACC TTTTTCGGC TACTGTTTTC AGCAATGCA GTTGAATGAG TACAAAATGC  
ACCACAGAAAT AGAGACTGCT ATCTACCCAA ATATTGCTGG TTGTTGAATC CATGGTAGGG AATTTCATG TATTGTACA  
ACCGCTATA AATACATCCC AAAATATGTG TAGAGCTAAA ATAGATG

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SEQ ID NO:737: (Length of Sequence = 243 Nucleotides)

TTAATCATTC AAACCTCATT TTATACAACG AGTGCATACA CCACTGGGGG AGTNTCTGAC TGATGGGTGG GAGGGCGGGC  
GGGGATGTCT NCAGCTATGA GTAGGGAGGA GCGGGGAAG CCTGGGTGC TTCTCTCTCT CGACTGACCG CTGTGTGTTT  
GTCCCCAGAG GAAGAGCGGN NGCAGTCAG CCCCGGGGG GATGGCAGAN TGGAGAGACG GACCTGCAGA AGTGGTGGCC  
AAG

SEQ ID NO:738: (Length of Sequence = 358 Nucleotides)

CGAGTCAGAG CTGGACAGCG GCGATGCCAT CTTTACATGG CCAGACCGAG AGAAGGGCAA ACTCCTGCAT GGTCAAGATG  
GCTCTGTACC CAACGGGCAG ACCCTCTNA AGGCCAGGAG CCGCGGGAG GAGATCTGT AGCCACCTGG TCTGTCTCT  
CAGGGCAGGG CCAGCACAC TNCOCGGCA GTCTCTCTAC CTCCCGASTN TGCGGGCAGC TNCGTGCCA GCATCTGCTG  
GTCATTTGCG CCTGACAGTC CCAACAGAA CCCCTNGGA CTTGAATCCA GAGANGTCT CCAGGNAACC CCTCAACGAA  
GCTGTGAAAT GAAGAGGTTT CCTCTTTAAA ACTGGTTT

SEQ ID NO:739: (Length of Sequence = 400 Nucleotides)

CATTTCTGGC CAGGCACGGT GGCTCATGCC TGTAATCCCA GCACTTTGGG AGGCCGAGGC AGGCGGATCA CGAGGTCAGG  
AGATGGTCTA GACCATCTG GCTAACACAG TGAACCCCTG TCTCTACTAA AAATACAAA AATTAGCTGG GCGTGGTGGC

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GCGTTAGTAT TTCCTTAAAT AACAGGTTAC AATAGAAAGA TACTGCCTGG AAGTTATCCT TTTCATTTTG GTTCATTTTC  
AGTTTTTGTT TATGATTAC ATAGCTGTTT AATTCATTG CTTATAGTAC AATCCTGCCA TAAAGTATTA AAGCACAAGA  
TACCTGTTAT TCCCTTCAAC ATCTGCATT TTTCAAGNTT TTATACTCTA TATCCACAGT ATGTCAGCAG TTCTTGACTG

SEQ ID NO:740: (Length of Sequence = 374 Nucleotides)

ATCGTCAGAT TCACCAAGGT TGAAATGAAA TAAAAAATGG TAAGGGCAGC CAGACAGAAA GGTCAGGTTA CCCACAAAGG  
GAAGCCCATC AGACTAACAG CAGCTCTCTC GGCAGAAACC CTACAAGCCA GAAGAGAGTG GGAGCCAATA TTCAACATTC  
TTAAAGAAAA GANTTTTCAA CCCAGANITT CATATTTCAGC CAAACTAAGC TTCATAAGTG AAGGAGANAT AAAATCCTTT  
ACAGNCAAGC AAATGCTGAG GGATTCTGTC ACTNCCAGAC CTGCCTTACA AGAGGTCCTG AAAGGANGCA CTAAACATGG  
AAAGGGNATA ACTGGTACCA GNCAGTCAA AAACATACCA AAATTGTAAA GGGA

SEQ ID NO:741: (Length of Sequence = 290 Nucleotides)

AATTATTTCA TAATAATGTA ATAAACATTC ATGAACATAC CCTATCAAGC AAGAGCTAGA ACCTTGGCAA TCATTTCCCTT  
GACTCCTCCA GTTGTGGCT ATCATGATAT TCAGCCCCAA GTTCATCATT TCTGTTTTTN CTTCTATACA GGTTCCTTAT  
ATGTATTTCT AAAATCATT GGTATTTCA TCTTTGTAAG AATCATTGT NCTATTTTCC CCACTAGTTC TACATTGCAT  
TCATATTGTT GTGGGTGTG GTAATTCATT NATTTTGAAT GCTGTATAAT

SEQ ID NO:742: (Length of Sequence = 274 Nucleotides)

TTAAGAGGAA AAGTATCTTT AGGAATTINT TTCTATAGAG TTCTTCATTA ACATTTATAC GAGTTTTTTG CTGAGTCAGA  
TGGACAGTGG GGTTCTGATG CTTTTCCTT CCGCCTGCC AGGCTGGCCC AGGCAGTGCT CCCACCANTC TATGAGCGTN  
TCCGGGGCCG NGGATCTGGG CAGCATCCAT GGTGCCGGGG CCATCCCCAG CGGNACCACA AGGTGSCAGC GTTENTCCAC  
GAAANACCGN CTTTCGCTC TGCTTCCCCA AAGG

SEQ ID NO:743: (Length of Sequence = 398 Nucleotides)

TTGCTTTGCA GTTATCTGGA ACTCCTCGTG CTCTTTCAGG AGCTCCTGGG TGTGCTGTAT ACTGGAGCCC GTGGAGGTGT  
GTGTGGAAAG GTAGAAGTGG CCATTGTCAT GGATCCATTC CAAAGCCTGC TTGGCACTCC TCTCAAAGAC CACGTACTGC  
TGACACTGGT CCAGCGTCT CTTCCTCATG GTCCAGTAAT GCAATACCTT GTTCTCCCGT TGGAAGAGTT CATTCAGAT  
ATTTTTTCACT TGCTGTTTCA GAGCTTTGAT GTGCGTCACC ATTCTGGCA TGTTACGCT TGTTCCTGTG CAGGTATTTT  
AGGAAGACGT CTGCATTTCT CCGAGCAAGN GGTGCAAGCC TTCAGGAATG CCTCCTTTNC TNCAGGGTGC GGTTTTCA

SEQ ID NO:744: (Length of Sequence = 359 Nucleotides)

TGCGACAGAG TCTTGCACTG TCACCTGGGC TGGAGTGCAG TGGTGCAATC TCAGCTCACT GCAACCTCTG CCTTCCGGGT  
TCAAGCCATT CTCTGCCTC AGCCTCCAG GTAGCTGGGA TTACAGGCAC CTGCCACCAT GCCCAGCTAA CTTTTTGTAT  
TGTTTTTTT AGTAGAGATG GGGTTTCACT ATGTGGCCA GGCTGGTCTC AAACCTCTGA CCTCGTGATC TGTGCGCCIN  
GGCCCCCAA AGTTCTGGGA GTACAGGCGT GAACCAACGN GNCCGGCTGG GGCTGCTTAT TTAAATCCCC TAGAAGAGG  
GATTCTNCAG CTACACCACA CCTTAACTT NGAAGGACC

SEQ ID NO:745: (Length of Sequence = 361 Nucleotides)

CCCTTAATTA AAAGTTTAT TTTTAAAAA CGTAACAGAC CACTCTAAGA AACTTTGGCA TTCAAAGCAG TAGTTACTGT  
TATTTGCTAA CTCTGAAAAA AAAATTTTNC CCTTCAAAA CAACCGGCAA ACTCCTGCCA CTCTAGCT TGGTGGCTGC

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CAGCGTGCAC TGCAGGAAAA CGGTGGGTGG AGGGATAGGA AGGCCCTCAC GCTCCCAACC CACGGAGAAA NTGCAGATGG  
TGACAAGCTG CATCTGGACT CCAGGNTGTA TCTGACAAAG AGGGAGATGG TNCCTCCTNT CCCCINCACC AGCTCCACTT  
TTNCTGCTGA AGAAACAGAG ATGTGGAGGC AGGCGTGACC T

SEQ ID NO:746: (Length of Sequence = 285 Nucleotides)

GTGTTTTTAT TTATACCTAC AAAAAGAAAA CAAGATGATG GTATCAAAAG GACAATTTAC AAATAAGAA TAGTAACATA  
GCTTTTCAGCA TCCTGTGCTT GAACATCACA CATCTACAAG TCTTTCAAGN CTTAATGCAA CAGGAATNTG TCTGGAGACC  
AGCAAGANCA TCAATAGAGA GCACTGNTCC CAAGCAAAAG CCACTAACCT TTTAGATGAG AAGTCCACAC AACGGATTNT  
TAGGGGAGGA TTTGGGNGAA GCAGCCCAT TGCCTAATAC ATTGG

SEQ ID NO:747: (Length of Sequence = 302 Nucleotides)

CAATGCAGTT TTAGAGTGCT CATTCTTTCA ACTTATTTGA CAAATATTTA CTGAATGTCT GCCATAAGGC AGTAAAGGCA  
CAGAATGACT CAAAGCCTTT TTNCCCTTAT GGGGTGTAT TNCCTAGTGGT GGAGACAGAC AATGAGCAAG TAAACAATCA  
ATCGGCTAAT GATAACTACT GTGAAGAAAA TAAAGCAGGN CAAGGGAATA GAGTATGCCA TCATTAAGAC TGGTTAGGGA  
AAGCTTCTTT GAAGACATGG CAGCTATTGA AAACCTGACT GATACAAAGA AGCAAGTCAT GT

SEQ ID NO:748: (Length of Sequence = 346 Nucleotides)

GAGACCAGCC TGGGCAACAC ACTGAAACCC TCCTCTCTAA AAAGAAGAAA AAAATAAGAG TTTTGAGTTT TTCCAAGAA  
GAATGCTCAG TACGTTTGIN ACTATCAGA AAGAAGAATC TGGAGGTCTT GACGTGTAAA CAGAGTTGTG GGTACCATCT  
CACCAGAATT GCTGCCCTGA AGCCAAAGGA CTGAGCTGCT CAGATCTGGA AGTAATCTGA GCCCCATTT CCAAGAAGAG  
AATGCAGAA TTTTATAGGA AGAAGGGACC TGATCCCTGT CAATGGAAGC ATTTTAAAT TTTTAACTGA AGTCCAGGA  
GCATACAAA AGCCAGGNA TTTACC

SEQ ID NO:749: (Length of Sequence = 325 Nucleotides)

CTAACTTTA TTTTCAAAAG CTTAAGGCC AAATACAAAC TGAGGTCTTC CTTCCTAACA AATTAATACT AAAATGAAAC  
AGCTTTTNTT GTGTCCTTAA GACAAAATAA GGAAGGAAAA CGTAGCTGCA GTGTGCCAG ATGGATATG GTCTTTTAAA  
ATATATCTGA AAGTAGTAGT CAGAATGANT TATGGTTGGA AACTGAGGN ATCTTCTGGT TGCAGGTGCA AAGTACTTT  
NTTATTCTT GTCTCAGTCT CTTGATAGC CACTTCATC TGCTACTACT CACTTTCTC CTAAAATAC TTCATCTATT  
TTCAG

SEQ ID NO:750: (Length of Sequence = 341 Nucleotides)

TGTATTTTNA GTAGAGAAGG GGTTCGCCA AGTTGNCAG GCTGGTCTCG AACTCCTGAT CTCAGGAGAT CGGCTGCCT  
CGGCTCCCA AAATGCTGGG ATTATAGGCG TGACACTGTC TCTGGTTTAA GAGAACCATG GGCTGAGATA TTNAGGAATT  
CTCCAGGCCA CGAATCTTGG GGCAATGAGC CTCTCCGTA CCCACAGCA TCTNGGGGAG CTGGTGTGCT GATGGGGTCA  
GCTCTCCAG CTGCTGGAA AATTCTCAGA CACTCCCTAA GAGGACATCT CCACCCCTNC CACTCTNAGC TCACTGCTTT  
CTAACATTC TCATTTGTTT G

SEQ ID NO:751: (Length of Sequence = 377 Nucleotides)

TTTTTTGAGA CGGAGCTTNG CTCGTGACC CAGGCTGGAG TGCAGTAAGC CCATCTCTGC TCACTGCAAG CTTACACCAT  
TCTCCTGCCT CAGCTTCCA AGTAGCTGGG ACCACAGATG CCGCCACCA TGCCCGGCTA ATTTTTGTG TGTGTGTTT  
TAGTAGAGAT GGGGTTTCAC CATGTTAGCC AGGATGGTCT GGCCCTCCAG CTTCCTCTGA GTCCCTTCAT AAACATTTGT

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TTATCTTGTA AAATAATTTG TTCCATTTCT AATTAGTACA TAATGAGAGA GGCAGTGTA TGGTTTGTC CTAAGNCCTT  
TCTTGCCAAG ACTTTCAAAG CCAAAAACCTT CACAGTTTT CCIAGATGAC TAGACAG

SEQ ID NO:752: (Length of Sequence = 359 Nucleotides)

AAGTCAGGCG TTCTGGGGC AGCTGTCTG TGAAGTTGGT GGGACGTGCT ACCCTGGGCC AGCTCCAGGT GAGCNTGGCT  
TCGGTGGTCC CCGTGGGCTC CTNAGTGGCG AGGGTGAGGC CTGGCACTGG GCCTCTAACT GGCCCCGTGG CCTGCACTC  
TTTNGTGCTG GGTGCCCCCT TGCCCTTTNT CCGGCTGTTC CAAGCGCTGC TAAGCCTCAT CENCCCCNAG TACTTTNACA  
ANCTGGCGCC CTGNTCTGAA GCAGGTGAGT GGCCATCANT CGTGGTCATC TTGNCCTCAT NATCCAGCT TTGGCCCCCTG  
GTGGGGCTCG GCAAGCAGCT TCTCCTTGGG GAGGGTCTT

SEQ ID NO:753: (Length of Sequence = Nucleotides)

AGCTTCAACT TGGAAAGAAG GATGATGCAG TTTTGGGCCC TCCGGCCATC AATNACCGAC AGCNCCTTTGA CCTTGCGGGA  
AGCCAGGTAT ATGINTTCAG TGGAGCCCAG CTCTTTCTGG TGCTCTGGT AGGCTGAAAA CATCTTTTCA AAATCCTCTA  
GGTCCAGGT CCGAAATACC TGCATGTCAT CAATCTCATT CCATACGGTG CCAGGGACAC GCTCCTCATT CAGCTTCACC  
CAGTTGAAGG ACTTCAGTGG GTGAGAAGGC TGGGGGACAC GCTTTTCTCT GAGTGGGACG

SEQ ID NO:754: (Length of Sequence = 342 Nucleotides)

CTGTTGAAGT GCAGGTTTGA TCCAGCCAGT ATAGAAGTAC CTCTGTAGGG GTGAGGAGGA CTGINTCTGT TATCATCCTT  
GATTGINTTC CTTCAAGGAG CATTGCACTG TAAGTACATC AGAATGACAA ATTGATGAAC TGCAACAGTA TCTTTTGTGTC  
AATGTTCCAC ATAATGCAA TGCCATACGT TGTGTGAATA TTATGTTGGA ATACAGTGCT GATATCTTGG AAAACCATAA  
CTGCCTCTTA ATTAAACATA GNGTAATACA TAGTNCCTGA TTTTTTTAA AGTGAGCTNT AATGGGNAAG TATTTTINAT  
ATGCTTTIAGC TATAGCTAAA GG

SEQ ID NO:755: (Length of Sequence = 321 Nucleotides)

CATTGCCATC TTCTCAGTCC TTCTCCCTTT CTTTCCAAGT AGTTACGGC CTTAGGGCGA AGGTGGCTTT TATTTCTCT  
CTTGGGGAAG GAGGGGGAGG GAGCTTTCCC AAGCACATCA ACCTAAGGAA GGGGTGGTTG CCCCCCAGC AGGAGGGGGC  
TGGAACGTCT GATCATTCGG AAGGAAGGGT TCGTCTTGT CCACTTCTCG GCCCTTGGCT GCAAGGGTGT GCTTNGCAGG  
GGTCACTCCC CTTGGGGGTG GCAGCTCTG CATCAGTNGA GGGCACAAGG AGGTATCTGC TGGTGTTCAC GAAGAGGAGG  
G

SEQ ID NO:756: (Length of Sequence = 368 Nucleotides)

TGGCATGGTT GCATGTCCT GTAATCTCAG CTACTGGAG GCTGAGGCAG GAGAATTGCT TGAACCTGGG AGGTGGAGTT  
TGCAGTGAGC CAAGATCGCA CCACTGCACT CTAGCCTGGG TGACCGAGCA AGATTCAATT TCAAAATAAA TAAATAAATA  
AATGAGAAAA AAATATAGAT ATAGTAAAGG GAACAATTAC ATTCTACAAT ATTTTAGCAG AAGTAAATAT GGTTTAATTC  
AATGGAACA GCTCTGCTCT ATNGAAAATT CACAAATATT AAAAATAAAC AACTCTACA TTAAACCTCT GAGCACTAGA  
NGCTTACCTA CTTAATCATA GGGCTCATAT ACTGTAAGGG GGTAAAT

SEQ ID NO:757: (Length of Sequence = 339 Nucleotides)

CTTCCACTGC CAGGTATATG TCCCGGGAAG CCCCCACCC CTTGNTTTC CTCTCCGCT TTCCCTAACC CGTCTCGGG  
GGGCATCTAC GNTCTGCTCT CNGCTCTCT CTNCTCGAAC TCCCTTGTG CTGCGGCGT GCGTCTCTGG TACTGCTGGT  
ACTCGGACAC CAGGTCTTTC ATGTTGCTCT CCGCTCGGT GAATCCATC TCGTCCATGC CCTCNCCTGT NTACCACTGC  
AGGAAGGCCT TTGNCGGAA CATGGCCGTG AACTGCTCGG AGATGCGCTT NAACAGNTCC TGGGATGGCC GTGCTGTTTC  
CGATGAAGGT GGCCGACAT

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SEQ ID NO:758: (Length of Sequence = 356 Nucleotides)

TTTTTTTGT TTTCTTTTGT ATATGGGTTA AATGTTTCCG TTATATTTC TAATTGGCTA TTGCTCGTAT AAATAGATGT  
GGTTTTAGGC ACATATTTTA TATCGGGCTC CTATACTAAA AATCTTTTAT CATTTCACAC AGTTTTCACT TATGCTCTTG  
GGTTTGAAGG TAGACAATAA TGTCATCTAC ACATAATGAT ACTNCTGTTT TCNCTTTTAA AATGCTTATA GCTCTTINAT  
TTTTATTGCT TTGCTTGTGC TATAAATNCT AGAATGAAGT TAAATAATCA TAGCAGATAT CCTTTTTCCT GATTTAATTA  
TAATGCTCCT GAAATTTTAT TAAGTATGAT GACTGT

SEQ ID NO:759: (Length of Sequence = 333 Nucleotides)

GCCATGTGGG GCGGGGAGGG CGGTGGGGTC GGGCGGGGGG GACGGTCAAA GACTTCATAA ATAAGAGGCG GGTCCCAGAC  
CCNCAATTT GTCAACATGT CTAAATAGG TGCAATTATT AAATCTTATG TACAACAAGA ATCACTTTGC ATAGCAATGG  
TGAGGACACA GGACGGGTGC AGTGATGTGA CTGGGTCTTC TTGTCCCAAG GCGGGGGGGC GAGTTCGCAG CTCAGCTCGG  
AGCCTCTAGG AAGAAAGCAT CCTTCGTCCG GCGGCAATN GTGGCATCGG AGTTGACTTT TCCACACGA CGGCATCAAN  
CACAAAGGCA AAG

SEQ ID NO:760: (Length of Sequence = 311 Nucleotides)

CGTCTCTCT GCCCAACCCG CCCCCACCA TTGCGAGGA GGCTGAAGAT GGAGATGGT CCGGCAGCAT CTNCGGTTCC  
ACCGGAGACC GCTTGGTGGC ATCAGCTTGC CCGGCCCGGC CGCAGATATT CCGGCTCGA GAACAGCTCA TGTGAGAGC  
CAACAGCCTG AAGAAAGCAA TTGTCAGAT CATAGAACAC ACAGAAAAAG CTGTGCATGA GCAGAATGCC CAGACCCAGG  
AGCAGGAGGG CTTCGTCTG GGGCTCTNIN AGTCAGAGGN GAAGATNGAC CACAGAGTTT GNCCACCACT T

SEQ ID NO:761: (Length of Sequence = 314 Nucleotides)

TTTTTTTCT TTTTTTTAAG AGACAGGGTC TCACCTCTTT TCCAGGCTG GAGTGCATG GCAACGATCA TAGCTCACTG  
CATCTCGAA CTCCTGGCCC CAAGGGATCC TCCCCTTTG GCTTCCCAA GCACTGAGAT TGCAGGCGTG AGACACCTCA  
CCTGGCTTGT CTGAGAACAT CTTTTAAAA AAATCCCTTC TCTTGGGTT TCTGTTACCC ATATGCTAC TCAATTGGT  
TGCTCAGCT TTGTTGTTGT AATGCAAAAG CAGCCATAGA CANTACATGC ATTGAATGAG TGTAGTGCAT TCCA

SEQ ID NO:762: (Length of Sequence = 319 Nucleotides)

ATAAAGGTAT ATAAAAGTTG AAATTAAAAG ACACATATCA TGAAATACT AACAAAAAGC TATAATAGCT ATATTAATAT  
CAGGTAAAT AGACTTTAGG ACAAAGCAT TATTAAGGAA GGGAAAGTTG CTATAATAAT AAAAGGTTGA GTTAATCAAA  
AAGATATAAT AGTTTAAAC ATTATGCATA TAATTAANIT CCTCAAAAT AGACAAAGCA CATATTGATA CTTAAGGNAG  
AAATTGATAA ATCCATCACC ACAGTGGGAA ATTAGGAAGT TTCTGTACAC CTCTTTCACT TGTGATAGG TCAATGGA

SEQ ID NO:763: (Length of Sequence = 369 Nucleotides)

TCCAACTCC TGCCAGATAT AATCTAAAA ATCTGTTTGT TAATTTTATT ATTTTATTT TGGATTTTAA AATGCTTGGG  
AATTGGGAGA TATGCACAAT TGCTTTTGT TTGTTACAA AATTAAATGC GTATTTGGGT ACTTATAGGA CACTATTGT  
AAAAACATTT ATTTCTTCAG ACATTGATGG TCTTGTCCCA GTTATTAAAC ACATCTACAT GTTTAAGAAT AAATTTCTTA  
TCTACTTCTT ATTCATTGA AAATTACCTT TCTATCCTCC TACTCTGGAA GTCTTTATGN ATTCTGTCT AATCATTAGT  
ATCCCATTC TTCTTCAAGA GGATGTCTGT CCAAGTAGGAA TTTCTCCA

SEQ ID NO:764: (Length of Sequence = 381 Nucleotides)

CGGGTAGCAG TTGCTGAGTG TCAGCTAGAC AGCAGCGACT AGGGCTCGGG CGCCGCGGAG ATGCCCTTNT TCACCGCCAA  
CCCTTCGAG CAAGACGTGG AAAAAGCCAC GAATGAGTAC AACACTACAG AAGATTGGAG TCTTATTATG GACATATGTG

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ACAAAGTTGG AAGTACTCCT AATGGAGCGA AAGATTGCCT AAAAGCCATA ATGAAAAGGG TAAATCATAA GGTTCACAT  
 GTTGTCTGC AAGCACTAAC TCTTCTGGG GCTTGTGTGG CAACTNIGG AAAGATATTT CATTTAGAAG TATGTTCCCG  
 TGGATTTTNC AACAGAAGTA CGTGCTGTGA TTAAAAATAA GGGCACATCC TAAAGTATGT G

SEQ ID NO:765: (Length of Sequence = 329 Nucleotides)

TTGTCTGCTT GATGCAGGAG CTGAGGAGCT GCACAGAAGG TTAAAAGAGC TGTAACACAA ACAGGGCTGC AACATGCCCC  
 TTGCTCCCCA CAGGGAGAGA AGAGCTCTGG CCTCGGAGA AGCCAGACC TGGGAGCTCC TTGAGCCCGG GCTGTGACTC  
 CCTCTTTGGG GOCCTGGTTG GCGTCACTGC ATTGCCAGT GCCACTGTTG GAAGCTGCTT GTNATGCGCC TGGTCCAGGG  
 GGAAGCTGTT TGTGTGTGC CTGGTCCAGC CACCTCATGG AGAGCCTGTG CTGGCACCTG GGAGCTGCCC AACCTGGGCA  
 GCAAGCTTT

SEQ ID NO:766: (Length of Sequence = 321 Nucleotides)

GCAGTGGCAG GTAGATTTTA TTGGCCTGGG ACACACAGGG GATACCTCA CCCACGATGG GGTGGGGGGT GTGGTGTGA  
 AGATATAATC TNATGGTCAC TTGTGGTAGA ATCGGGGTT CTGGCTGTNT TGGATGAAGG GGAGCCGAGG GCCAGGTTGG  
 CTGGTAGCTG CAAACCGAC TTTCCTGCTG GCTGCATCTG CACAGGGAGC TGGGGGGAAG CAAGGAGTCC AGGGGCTGGA  
 TGCAGAGCTT GAGTCGGAGA AGCCAGTCTG CTGGTATGCA TGINCCATCT GCTTTINCAA GGNCAGGGCA CCACCAGGCT  
 T

SEQ ID NO:767: (Length of Sequence = 313 Nucleotides)

ACCGCCCCCT TAGTTCATA TTCTGTCCCC GTTACCCAGG GCATCATAGA CACTCAACAA CCATTGCTTG AATATGCAAT  
 TGGATGAAAT GAATAACGA CCAGAGGAAT AATCCAGACA GAGCAGCAGT GGCCAAGGGA AGGGAGGATT GATTATGGG  
 AGAAAATTAG GGAATGAAA TCCATAGAAA GGGTTGCCT AAGTNAGAT GATGACTINGA GCCAGAAGAC ACCCGGGGA  
 GAGGAATINT TTCACATGGT AGGAAAAGGG GAGGAGGGAG AGAGGTGGGG TGGTGGAGTN CAGCCTCGAG GCT

SEQ ID NO:768: (Length of Sequence = 372 Nucleotides)

TCTCTCTCT GCGTGTAT ATCTGTCAG TCCTATGATA CCCCTGTGGC CCACTTCTTA CTTAGGTCTC TCCTAACATG  
 TATCTATGAC ACATTGATCC CTAACAGCTA TGATTCINCT TATACTTTIN CAGTAATTTA AATTTTATCA TTCTACTGCT  
 TGTTCAATAC ATCTCTCTAT GTAAATCTTG ACTCCATAAT GAGGTTTTTA ACTTGAAGG GGTGGAGT TATCTGCTGC  
 CTGGTATCCC CCCCAGCAT ACACAAGAGT ACATTTTAA CACATTACAC CTGAGTGATT GINGTAAAC ACAGATGCAA  
 TCTTTCCACC ATCCTCTAGG AATCTCTCTG TGGGCTTTCC ATTGGGTAC CC

SEQ ID NO:769: (Length of Sequence = 321 Nucleotides)

GCAGCCAGAG CTCCAAGGCT CCCCAGGGG AGGTGACCGC CGAGGAGGCA GCAGGCGCTT CCCCCGGA GGCCAACGGC  
 ATGGAGAATG GCCACGTGAA AAGCAATGGA GACTTATCCC CCAAGGGTGA AGGGGAGTGG CCCCCTGTGA ACGGAACAGA  
 TGAGGCAGCC GGGGCCACTN GCGATGCCAT CGAGCCAGCA CCCCCTAGCC AGGGTGTGTA GGCCAAGGGG GAGGTCCCCC  
 CCAAGGAGAC CCCCAGAG AAGAAGAAAT TTNNTTTCAA GAAGCCTTTC AAATTGAGCG GCCTGTCTT CAAGAGAAAT  
 C

SEQ ID NO:770: (Length of Sequence = 364 Nucleotides)

TTAAATCAGG AAATGTGATG CCTCCATCTA TGGTTTTTGA AAGTCATCAG CCAGAGCTAA GGTAATGAGG ATTCCCTCCT  
 TCATGTTTAT ATGTCTTTAC ACTGTGCACA ACTGTCCCTA AAAAAACAAA CCCCCTGGCA ATTTCTCCAG GCTTATGCT  
 TCCCCGGTTT CAGTTACATT TCAGCTTAGC ATTTTCAAAA TAACAATTG TTCTTGGCAG CTTGTCTATA TATTTNATTT

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ACCTCTCTTG TTATCCCCAC TTTTCATGCT CTATGTCCCA TAGGCAATTT GACAAAGACT GCTTTGACAA AGGATTCTCA  
GACTTCTATC TCTACCTCTC ATCTGACTTG GCGGAGGAT TAGG

SEQ ID NO:771: (Length of Sequence = 357 Nucleotides)

CAGCTCACTG CAACCTCCAC CTCACAGGT CAAGTGATTC CTTCCTCAN CTTCCCAAGT AGCTGGGACT ACCGGTGCAC  
ACCACCATGT CCAGCTAATT TTTGTATTTT TNATTAGAGA CAGGGTTTCA CTATATGTTG GCCAGGCTGG TCTCAAACCTC  
CTGACCTCAA GTGATCCGCC CACCTCGCG TCCCAAAATG CTGGGATTAC AGGTGTGAGC CACCATGCCC GGCCTAAATT  
ATAGCTATTT TAGAATGTTG AAAGTAGTAT TATGTGATTT CAGTTTGCCA TAAATTTTTC ATATGTTTAC TAATTATTTT  
TNTTTTGTG GATATATCT: CTGGAAATCT ATTGAGG

SEQ ID NO:772: (Length of Sequence = 359 Nucleotides)

CCTCTCAGGA AAACACCTAG ACATTATGTA ATGTATTTGA AGATTATGT ACCCTTTAAC CAGCAGTTGT GTACCTAGGT  
ACAAACTTTG CAAGCACACA CGCATGINTG TNCCAAAAG CACATACAAA AACACTCCTA ACAGCATTAT TTGTAATAAT  
AAAATATAAG AAATTACCTA AATATCCATC GACTGCCATT GGTAGTATGG TTATACAATG GAATTCCTACA CAGCAATGAA  
AAGGAGCTAG AGCTACATGC AACACATGG ATACAACCTCA CAAACGTAAG ACTTAGTGGG AAAANGCTAG ACACAAAGTT  
AACACCTTCT ATATGTGGGT TCCAGTTATA TAAACCCA

SEQ ID NO:773: (Length of Sequence = 361 Nucleotides)

GAGCCTACGG CAGAAAAAGA AACATCTTCC TATAAAACT AGACAGAATA ATTCTCAGAA TCTGCTTTCG GATGTGTGCG  
TTCAACCCAC AGAGTAAAC TTINCTTTTG ATAGAGCAGT TTGAAACAC TCTTTTGTGTA GTATTNCAAT GTGTATATTT  
AGAGCGCTT GAAGCTACG CTAGAAATGG AAATATCTCC CCATAAAACC AAGACAGAAG CAATCTCAGA AACTAATGTG  
TGATGGCTGC ATTCACACACA CACGGTGGAC CATTTCTCTT GATAGAGCAG TTTTGAAACA CTCTTCTGT AGAATCTGCA  
AGTGGGATAA TTGGGACCTC CTAGAGGGCC TTCGTTGGAA C

SEQ ID NO:774: (Length of Sequence = 387 Nucleotides)

GTTCGCTCT TGTGCCCCAG GCTGGAGTGC AATGGCGCAA TCTCGACTCA CCACAACCTC CGCTCCCGAG GTTCAAGCAA  
TTCTCTGCTC TCAGCCTCCC GAGTAGCTGG GATTACAGGC ATGCGCCACT ACCCCAGCTA ATTTTGTATT TTNAGTAGAG  
ATGGGGTTTC TCCATGTTGG TCAGGCTGGT CTGAACTCC TGACCTCAGG TGATCCGCCT GCCTCGGCCT CCCAAAGTGC  
TGGGATTACA GGCATAAGCC ACTGCGCCA GCCAGAAGAT GCATGATTTT TTAGGATCAT ATGCTGTTTG TAGCCATAAG  
GTAAATCATG TCTCTTCAA TCATGACTTT TGGGAACCTC CTGAATAATA AAAATGAGAG TTGAGAT

SEQ ID NO:775: (Length of Sequence = 401 Nucleotides)

GAATTINCT TTCTGCATCG TTCTGTCATA AAAAGGGGTA CTACTATAGA ATAGAATGCA GGCTTAGGAC CCCCCTAAGC  
TCACTGTICA ACCCAGCCCA GCAAACGGT CAGTTATAAA TTTINCTGCA GGTCCCTGAA ACAACAACAA AAAACTGGAT  
GAGGTTTCCC TCCATCTTG TTTTATGTC TTGGGAGCTT GACCTTATAA CCATACGCGG GTACTTTTNC TTGGTCTCTG  
CCATCCAGGG AACCAGAATT TGGGGGGTTA TGTATAGTT AGCTCTAAAA ATTATCTTGA GCAGTTAAAA GCCTTTTGCAA  
GCTTAAATTT GACTGCTGTA GNTCTTCT GGGGAAGGAG CAATGGGAAA CCTTNCCAAA GCTTATAGCT CANCCAGCTG  
A

SEQ ID NO:776: (Length of Sequence = 345 Nucleotides)



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AACACTGGGT AAGCACTTTG TATGINCTGG GCACTCTGCT AGAGATAATG TGTCTGGAAT TGGTGGGTTT TGGTCTCAC  
 TGACTTCAAG AATGAAGCCG TGGACCCCTG CAGTGAGTGT NACAGCTCTT AAGGTGGCGC GTCTGGAGTC TGTCCTTCT  
 NATGTTTACA TGTGTTTANA GTTTCINCTT TCTGGTGGGT TGTGGGTCTT CGCTGGCTCA GGTGTGAAGC TGCAGACCTT  
 TNOGGTGAGT GTTACAGCTC TTAAGGCGNC GGTCTGGAG TGTTCGTINC CTCCGGTGG GCTCGTGGTC TCGTGGGCT  
 CAGGAGTGAA GCTGCAGATC TTGCG

SEQ ID NO:777: (Length of Sequence = 229 Nucleotides)

ATTGGGGGAA CCAAGCCCA NTAAATGCTAT GGCTGTGCA GACTTGTAGA GGTACTGCCT TCATGGTCTT NGGTAAGATC  
 TGGGAGAATT CCTGGATT A CAGGCAGAA ACTCTNATC TCTTGCTTA CTCCCCCA AACAAATNAG TCTCTCTCTC  
 TCTCTCTCT GAGCTGCTA GAGCTGAGG AGGGGGTGAC ACAAGCACAG CTATGTACC AGGAAGCCA

SEQ ID NO:778: (Length of Sequence = 361 Nucleotides)

CAGAACTCA GGAATAAGC CATTAACTTT CAAAGAAATAT GTTGTGTGT TCGATATTTT CCATTCTTAA TCCACATCCA  
 CGTTGGTCAA GTAGAGCTTC CTAATCAGAA GCACAGCAGT TGCCATGGTG TTCTCTTCCA TCTGAAAGCA GCAATTTTCC  
 GCAGCGTCCA TTACAGAAT GTGCCATATT TACTCAGATT CTAATGTATA TTAAATATGC TTTGGAACT TAACAAGAAA  
 CGTCAAGCN CTCAGTAAAG AAAAGTTGTA GAAAACAAA ACTGAACAGC AGGCTTCTAG TTTCTCTCT CCCAAATAG  
 CTTAGTGGG ATTCAAAAAT GGAAGTGTG AATAAACTG C

SEQ ID NO:779: (Length of Sequence = 392 Nucleotides)

CCTAAGATGC CTGGCACAAT CAAAGACCTT TGGTGGCTTC CAGCATTAT AAGGCAGAGT CCAACACAC ACTTAAGAAT  
 GACTTACTCC TCTGGGGGAC CCCACCTTC CCTACCCCG CTTTGGCTCT GTCTCTCTGT GGAGCTGCCC CTGCCCCTAA  
 AACTGCTTC CTCTCTACCA ACCCGGACCA TATTTCCCTT CCTCCCTCA CCAGGTCCAG CAGTACCCAC CAOSTTTGTG  
 GACATCTCCC CAAGGAGCTC TCAGTATCA GAAGCAAGGA GTTAGCCTTC AGCCCCACCT CTGTGTCTTA GGTCTACAGT  
 GAGTNTCCAG TGATGCTTCC TACCGACTGC TTGGGGGTGC ACAAGAGTNA GGCCAGCAAG ATNCCAGCGG AA

SEQ ID NO:780: (Length of Sequence = 453 Nucleotides)

CTCTCTATTT TCTCTTTTCC TTTTGACCTA CCATAGGAGA CAGATTGCTC ATCTCCAAAT TTCTCTGCTG TCTGGGANT  
 GCCTGGTTTT CAACCTTGGT TAGGGTTTGG CTTAGGAATA GCATAATATC CCTTTGTGAG AGGTAAACA CTGAGTTAA  
 ATTTTGGAGG CCAGGTGTGG TGGCTCATGC CTGTAATCCC AGCACTTTGG GGGGCAAGG TGGGCAGATC ACGAGGTGAG  
 GAGATCAAGA CCATCCTTGC CAATATGGTG AAAACCGTTC TTTACTAAGA ATACAATAAT TAGCTGGATG TGGTGGCACA  
 CGCTGTGGG TCCAGCTAC TTGGGAGGCT GAGGCGGAG AATCGCTTGA GNCCTGGGAA GTGGAGGTG CAGTNAAGGT  
 GAGATGGGC CACTGCACIN CAGCCTGGG TGAGAGAGCA AGACTTCCGT TTC

SEQ ID NO:781: (Length of Sequence = 306 Nucleotides)

AAGCTACTCG GGAGGCTGAG GTGGGAGAAT CGCTGAACC TGGGAGACGG AGGTTCAGA GAGCCGAGAT TGCCCATCA  
 CACTCCAGCC TGGGCGACAG AGTGAACTC CATCTCAAAA AAAAAAAAAA AGAACCACCA CTNTAACTGA GAAATAGATG  
 NTCCCAITAA CAGTTTAGAA AATGTATATA ACTCTAATCC ACAGAGGTTT ATACTTACAA GCAACTCATG GTTCCCTTT  
 TAAGGGCCAC ATGTGGAAAA TTAATCTGAA CAGTTAGTGC AAGGAGGAGT CATACCTCAG TGGAAA

SEQ ID NO:782: (Length of Sequence = 443 Nucleotides)

GTCTCGGGCT CTGACCTCA GGTGATCTGC CTGCTCGGC CTCCAAAGT GCTGGGACTA CAGGCATGAG CCCTGCACC  
 TGGCCTAATT CTACATTTIN ATCTACAGCA GACCTTTTAT CATAAAAGAG TTTCTATAAA ACATTTCTCA AAAGAAAATA

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TGTATTGACA TTCTATTTTC TTCTCTCTCC AGATACTATT TTTNGGATTT NAAACATACA CAATACTTAG GAGACTTGT  
 TTACTCAGAG TGGAAAATTT TNCAGGGAC AAAGTCAACA CAANGAACA AACACAAAA AATAGCCAGA AAGAGAACAG  
 TTAAGTGACG CTCGGTGAGT CCCGGCAGTT CCTTCCCGGC ACTGGCTCGT CCTGGGGTT CTCAAGGTT CATGCGGCCA  
 CAGCGTCCGT CCACCTGTT CACGNGAGCC ACATGCTGGA ATT

SEQ ID NO:783: (Length of Sequence = 350 Nucleotides)

CATTTCAGCC GGGCACAGTG ACTCATGCTT GTAATCCAG CATGNTTGA GACATAGCAG TAGGGACTAT CGACAAAGAA  
 ACACACAGAG GGAAAAAGAA TTCCACATTT GGGAGGCTGA CGCATGAGGT TCACCTGAGG TCAGAAGTTC AAGACAAGCC  
 TGGGTAACAT GGTAAAACCC CGTCTCCACT AAAAATACAA AANTTAGCTG GGCATGGTGG CCTGGGGCTG CAGTCTCGAC  
 TACTTGGGAG GCTGAGGCAT GAGAACCCTT TGAACCCGG AGGTGGAGGT TGCAGTGAGC AGAGGTCATG CTAATCTCAA  
 GCCTGGGGCA ACAGAGCGAG ACCCTGTCTC

SEQ ID NO:784: (Length of Sequence = 265 Nucleotides)

ATAACTGAAA AATGGAAGAA AATATTGCA AATTACATAT GTGAAAGCA GTTAATATCA AAAATATATA AGANACTCAA  
 AGGACTATAC AACAAAAAC AAATAACCAT GAAAAATAAG CAAAAGATAT ATATAANINA TTINCAAAGA AAGACATACA  
 TATAGCTTGG CAGATAGATG AATATGGCTC AAAGTCAATT ATCATCANGG AAAGGCAAAC CAAAACAACT CTAAGATATA  
 AACTCACTCC TGTTAAANTG TTAA

SEQ ID NO:785: (Length of Sequence = 363 Nucleotides)

GTAAGNITG AGAAATCGGA TGGTGTCTGT GTCTGTGTAG AAAGAAGTAG ACATGGGAGA CTTTTCATTT TGTNCTGTAC  
 TAAGAAAAAT TCTTCTGCTT TGGGATCTG TTGATCTATG ACCTTACCCC CAATCCTGTG CTCTCTGAAA CATGTGCTGT  
 GTCCACTCAG GGTAAATGG AAAAAAAGAA AGAAAAATGA AACCAGGAGT TGGCAATTAC TTTTTTTTTT TTAAAGACA  
 GAGTCTTGCT CTGTACCCCA GGCTGAAGTG CAGTGGTGAG ATCTTGGCTC ACTGCAACCT CCACCTCCCA AGCTCAAGTG  
 AATTCTCCAT GCTCAGNCT TTCAGAGTNA CTGGGGATTAA NAA

SEQ ID NO:786: (Length of Sequence = 291 Nucleotides)

AACAACAATC AGCCACAATG TGCTTTTAAG GATTTAAGTG ATAGTAAAGA TAAATGTGAG TMTTAAGAAT GGGATTTTAA  
 GACTAGGCTG ACACAAGGGA TCTTCTTNA ATAAGNCTT TGAGCAATTG TMTTTTGA GCTCATCCTT AAGGGCTGGA  
 CAGGAAGAAT CCTGTGTAT GTGTGCATGT TGAGCAATGC AAAAAACACT CTGCCAATC CTNGATACCA CATGGTCTNG  
 AGAAATGCAT GAGTGATTAA ACGCACGNT GGGTGTAGTC ATTATGTTCC T

SEQ ID NO:787: (Length of Sequence = 256 Nucleotides)

TATTTCTGTA TAATTTTAT TATGACCATA AAAATAACAA TGTAGTCAAT AACAAITTA TGTACATTT TAAATAAATT  
 AAAGTATATA ATTACACTGN TTGTAATAAA AAGTATAAAT GTTAGAGGTG ATGGATACCT TATTTACCTT AATGTAATTA  
 CTACACATTT TAGGCCTGAA TGAAATATG CCATATAAGG CATAAATATA TACACATACT ATATACCCAC AAATACCAAT  
 AATAAATTTT AATAAG

SEQ ID NO:788: (Length of Sequence = 322 Nucleotides)

GGTCCAATGA AGCTTCACT CGTTTTGAG TCAAGCAGA CGGCAATCA GCAAAAAGCA AAAATAATGT ATCTTACTGC  
 ATTACAGACA AAAAAAAGAA AAAAAACAGA GTGAACTAG ANCTATTTTC AATAGTAGTT TTCTGACAGC TATATAANCA  
 AATATAGANG ACATTATGGA ATTAGTGATG TGAACGAGAA CTGTGTCATG TATCCTGCCT GCCAGCAAAG GTAGAGATGG

CTGTNATATT TGTAATGGTT TACTATGAAG GCTGTTCCAT AACCTNCAAT ATCCACTGNT CTTGGGTGGT ATACCAAGGA  
TA

SEQ ID NO:789: (Length of Sequence = 357 Nucleotides)

TCAATGIGGC ATTTGTTTTT NITAGAAAAC CCTTAGTAA GCACTTCTCT AACCCAGAAT AGACACTGGG TATCTCCAA  
GAGTCCCAT GCTTTCATTT CATCTCCAC CCTCTCTGA GAGGGGAGG CAGGGGATAG GGGTGGTGT AGGCAGTCTC  
CAAAATGCCC CTCTAGACC CCTGAGAGAA TTCATGTTGC CAGCAATAAA CCAACAGCAC CTCAGTGGGG CATCANAGGG  
CCCTCTAGGC TCAAGGCTAT TGCCAAAGGG CATTCTGTT TTATGAGCTT CACGATGGGA ACCAAGGNAG GCTCTGCAA  
GACTTCCTAG GGGCTTGGTC CTTCAACTTA TGGGCCT

SEQ ID NO:790: (Length of Sequence = 366 Nucleotides)

TGGCCAGGCT GGTCTGAAC TCCTGACCTC ATGATACACC CGCCTTGGCC TCCCAAAGTG CTGGGAATAC AGGCGTGAGC  
ACTGCACCCA GCCTTGTGTG ATCTTTTAAA GTACAGTTCC CATAGATTTA CATTAAGAAT AAAAAAGTCA TGACATCTTG  
CTTTTATATG GCAGTTTACT CAAGCTTTT AAAGAAAGAG CATTATCTT GCTTTTACGT GGTTTTAGAA TGTGAAAAC  
CTTTTGNIAA ATCTGAGTAA TTTACTGCAT TTNCCATTAA TTCAGCTTAG TTAGACTGCT GNTCCAGTG CTTTGTTTTG  
CTGTACATA TACCCTAATA TGCTTTTAA CATATGNCCA AATTC

SEQ ID NO:791: (Length of Sequence = 317 Nucleotides)

AACAACTCCA ACCATAATGG AGAAGGAAAT GGCCAGAGTG GCCACTCTGC AGCGGGCCCT GGTTTTACGA GCAGAACTGA  
GCCTAGCAA TCTCTGGAA GTCTGCGCTA TAGTTACAA GATAGTTTGG GGTGAGCGGT GCCACGAAAT GTCAGTGGCT  
TTCTCAGTA TCCTACAGGG CAAGAAAAGG GAGATTTTAC TGGCCATGGG GAACGAAAGG GTAGAAATGT AAAATTCCCA  
AGCCTCTGC AGGAAGTGCT TCAGGNTAC CACCACCACC CTNACAAGN GATATCTAG GGGGTACTCA AGAGCAT

SEQ ID NO:792: (Length of Sequence = 258 Nucleotides)

GATCAATATA TCCAGGAATT TGTGAAAAGA TCCTAAACTT TTCAAACATG TCACAGGTAG TACTTGAAGT ATGCTTGGTA  
AAATGTACCG GTTAAAGCAG TATGTTTCTC AGATAGCCTG AGATTTTATT TAACAATTAT GTATCTAAGT CTACTAATAC  
ATTGAGCAA AAGAGTGTG GTTNCATAAA TAAGANGTCA GTATTTCACT TAGATTATTT CAGAACTTG TAAGTNCCTG  
TAAATAGCTA CTCGAAA

SEQ ID NO:793: (Length of Sequence = 282 Nucleotides)

GGAATGACAT GGTCAATCTN ACTTAAAAGA AACATTTTAG GTTCACACTT GCCAAGTTAG GAAGAAAACC AACCTTAGAT  
CCCTTCCCC CCACCAATAC TCCTTTCCCC AAACACCGTC CCCACCGNC TCTATGTTA ATTGAATTTT TATTTGTGAT  
ATATAGAAA CCTAACCCAT GGCTGINATG CTGAGTGTA TTTGGCTTCA AGCTCGAACC AGGNAVACAGC TTGGCCTGGA  
ACCTGAGAC AAGATGCTGG CTTCAANAAG TGGGGGCTCA CG

SEQ ID NO:794: (Length of Sequence = 330 Nucleotides)

GTGAGGCTG CAGGGAGCCA TGTTCACCCC ACTGCACTAC AGCCAGGGTG ACAACAAGAA CCTTTCTCGG CGTGAACCCA  
GGGGGCGGAG TTGCAGTGAG CCAAGATCGT GCCACTGCAC TCCACCAGCC TGGGTGACAG AGCAAGACTC CGTCTCAAAA  
AAAAGTTTAC TACTCGGCTT TAATTATTTT GTTTCGGTTT TGGGTGAAAT NATTTTATTA CTGACTGGTT CCTAGTTGT  
ACAGAAGCCT ATTATCTTTA GAGAGACTCT TCATGGTAAT TAACTCAGAT TCTTATTTTG CCTGGGTGAA AGGANGGCAA  
GTGGATCTAA

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SEQ ID NO:795: (Length of Sequence = 332 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACATATC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCCGGGT  
 CAAAGTCAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGANGT GGTATCCAGA  
 TAGGTTATCC TTGGAGAGTA TCCAGGGATG TCTCTTINCC TAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG  
 AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTNAGAATT CACGTAAGGN ATGATAATCT GAATTTCCAG GGCTAGGCTC  
 AGAAGCAGAA AT

SEQ ID NO:796: (Length of Sequence = 305 Nucleotides)

CCCAAGGGGA CAGCCTGANC TCCTGCTCA TAGTAGTGGC CAAATAATTT GGTGGACTGT GCCAACGCTA CTCCTGGGTT  
 TAATACCCAT CTCAGGCTT AAAGATGAGA GAACCTGGGA CTGTTGAGCA TGTTTAATAC TTTCTTGAT TTTTINCTTC  
 CTGTTTATGT GGAAGTTGA TTAAATGAC TGATAATGTG TATGAAAGCA CTGTAAACA TAAGAGAAAA ACCAATTAGT  
 GTATTGGCAA TCATGCAGTT AACATTTGAA AGTGCACTGT AAATTGTGAA GCATTATGTA AATCA

SEQ ID NO:797: (Length of Sequence = 337 Nucleotides)

GGCTGCATTA TGACAAGAAG TCAAGCTTCA TGACAGTTAG TATGGGCTGG AGTCTGCAAA GTCTGAACCTG TATTTCTATA  
 GAATGATTC AGGTTTCAGG GTGTTCCACC TGCCAGAACC CAAACTACA ACTATGGGCG ACACAAGGGA AGTTTTAGAA  
 ATCTCCCTCT ACACGCATTT CTGGTTTCT ATTATTCTC CATGGCAGCT GACAGATCTG GAAGTGNAAG TAGGGGATTC  
 TCAAAATCAA AGCCANGAAG ACACCTTGTG TGACACCAAT GGAGTCTCAG AGGGTGGGAA TAGAAGTGAC TTNGNCCAG  
 GCATTGCTG GGAACCT

SEQ ID NO:798: (Length of Sequence = 341 Nucleotides)

GAACCCCTGGA AGGTCTAGGC TACAGTGAGC CATGTTTGCA CCACTGCACC CCAGCCTGGG TGACAGAGTG AGACACTGTC  
 TCCAAAAATA ATAGTGATAA TAATAATAGT CATTTATTTT AAGTCTACAT GCTGAGATGC CAGAACAAGT AAAATTGGAT  
 TATAGATTCA AGCAGTATGT AGGTATACTT TCATAAATG AATACTGATG TAATTTTGGA TGATTAAAAA CAGNCTTTTA  
 GTAGGTGTTT AAAAATCTGG NTAATTCCTT TCATGNCATT CAAACATTTA GGTGGCCTGT CTTTGTTTTT TTAGGNTATA  
 ACTTGCAAAC ATTCANITGT T

SEQ ID NO:799: (Length of Sequence = 322 Nucleotides)

TTTTTGAGTA ATGAATTCAT TTAATATAAA CTTTAGTATA GCAGAATACT ACAGGTTACC CALATTTAAC CCTAAAAACA  
 AACAAATGAC AGGCACITCA GTGAAATAAC AAGCCCATGT TCAAATATAA AATGCTAAAA GTGAGAAAGA AATTATGAAA  
 ATATATACCT TTAATTTGCA GACATATAAA CACTTTTGGT ACAGTACAGA TGCATGATGC CAAAAAGTAA AATGNTCCAG  
 TTTAAGCTAA CACATTCCTT GTTTATACAG NTTATTTTNC TATAGCTCTC ATATAANANA AATATTNCCA GCTCACACAA  
 TG

SEQ ID NO:800: (Length of Sequence = 405 Nucleotides)

ATCAAGAGTT GTGTGGTCTA CCGACTGAGC CTGCCAGATA ACCCTGTAGT ACAATTTTIN CAGCATAGTG GAAAAGAAAG  
 CCATGNTCT GGGCAGGTCA GGGTTTGANC GCTAGTGCTT TGTATTAAAT ATCATGATGA TAGCTAGTAG ACAGGGCTTA  
 CCAGATACTA GGTGCTCTCT TAACTGCITT ACATATGTA GTTAACCTAT TTAATCTTCA TGACATCACC CCTGAGATAT  
 GGGTAATATT ATAATGCACA TTTTATAGGT GATGAGAGTG AAGCACTGTC ACAGATTACT CCAGCTTAGT TCATAGCAGA  
 GCTGGGACTT TTAATCAAG GCACTAGATG GTTCCAGAGC TTTGTACTAC TCTTCTGGG TCTTTCACAG TCTGAGCTGG  
 TCCGG

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SEQ ID NO:801: (Length of Sequence = 408 Nucleotides)

CTGCGTTCCA TGTAGCGTCT TCCACAGTNC TCTGTTATAA GATGGTTTGT TACATTGCTG CAGATATTTC TGCATGTCTC  
 TTGAGTTTCT CAAGACCAGG GTTGTATTTT TCCATGTCG TOGATGAAAC AGTACATGAC AAAAGAAGGT ACTTAATACA  
 TGTTTGATAA ATTAACTACT GTTTGGTAAA TTAATTATTG AAGGAAGACC CAGACTGGTT CTGATAAATC ATTGATTACA  
 TTTTACAAAT TTGGATAAAT TAGGGGAGCC TTGAGAAGTT AGAGCTCTAG GGAAGGTTCC AGGGAAOCTT TGAAGGATGT  
 GAAATATGGT TTTCAAAATT CATAGTTTAT TGCAGGATTC TGGNATACCT TCCCAAGTGA GGGGNAAGAT GAGGAAGANG  
 ATGGGCCT

SEQ ID NO:802: (Length of Sequence = 343 Nucleotides)

ATGAGACTTA CTCACTATCA TAAGAATAGC TTGGGAAAGA CCCACCCCA TGATTCACT GGGTCCCACC CACAACACAT  
 CAGAATTATG GGAGCTACAA TTAAAGATGA GATTTGGCTG TGGACACAGC CAGACCATAT TAGACTCATA ATTTGNCCTC  
 TGCACAGTAA GANCTGGGCT GGGATACCTC ATAGATCATA AACAAATCCG CACCCATGAA AAGATTTAGA GAGTCACACA  
 GGAAAGTCAA CAGAAGNCAG AGAGATGTGG GTCCTGGNCT TGCATGTCTA TAAGTGGTGG GNTCCTTCAG CTTTCACATN  
 TTCAGGCAGT GGGGTCAAGA AAC

SEQ ID NO:803: (Length of Sequence = 182 Nucleotides)

GAATGGCCTT NTCTAACGGC ATGTATGACT TGCATGANCT CTCTAAAGCT GAACTGGCCT CACCTCANCC TGTCTTGCTG  
 GCAAATGCGG CCTTCAGTGG GAAAGTAAAT GGCAGCTGCT GTNATTACCT GGTGNTGAA GAAAGACAGA TGGCAAAATT  
 NATGCTGTG GGGGATGACA GC

SEQ ID NO:804: (Length of Sequence = 312 Nucleotides)

TTTATTIAC TCCGTGTGTA AINATCACAA AACATATTCA TTGTCAAGTG AATGCACAGG CTTTCAAAGG TGATTGTATT  
 CTGCAAGGTG GGGAAATAGC AACTACCTTC TAAGGTGAAT GINCAGCTG CCATTTCCAA CCCCAAACCT CCTCTAGATT  
 CTCAACAGGG CAGCTTCTGC TTCTATGCTC TTTTGGGAAA GGTGAGCCCT GTGTAGAAGG CTTAATACCA ACATGCAGAT  
 CCACCTGAGA ATCACTGGAA TGCTCTGGAC CCAGCTGGAA TGCTTCCGGA ACCCAGTCAG GCTTNCGGAA AT

SEQ ID NO:805: (Length of Sequence = 411 Nucleotides)

CATGCAAAAT TCAGAATATA AAAAANTGCA GGGCCTGGTT GCCACATAC ATTCTCAGG TTAAGGTGGA TTAAAGATG  
 CCCAACAGAA CCCAATGAAT CAGAAGCTAA AAGGGACACT TCAGTGATCA GCAGACGCAT TCTCTCAGT AACAAATGGA  
 GGGAAAGTGA GCACACATTA ACTAGCGAAG TCACAAGGCT AGATTAGGGG TGTACAGAAA TCTAATTCCT GGTGCTATTT  
 GCAACTACAT ATATTTAAAA TACANGGAGA TAAATACCCA GAACACATTA AGCCTACTGA TTAAACAGA NCATTTCAAG  
 ACTGCTACAC AGAAAGGGAA GGAAGCTGT TAACCCAGCA CAGCAGACA CCTCACATAT TTCCGTCTCA GAGGTAAAT  
 GGGAAAGGAAG G

SEQ ID NO:806: (Length of Sequence = 287 Nucleotides)

GCATTINAGT GCTGATACAG ATACAGTGAG TTCTGTCCCT TTCTCTCCT NTATATTGAA GGGATTATAA ATGAAGCTCT  
 TTAAACATTC TGAGATCTNT AAGTTGATTT CTACATGAAC TCCAGTGGT GTTAATGACA TTTTCAGAAA AGATGCTTTA  
 CTAGCTGAC AAGAAAAAGT ACTCTGTAG CCTTTATTG TATGTGATAA AACAGAGTTG ATAAAATAAT CTACTATTAA  
 CTTATCAATG CAGTCTTACA GAATCCACCT ANTTACAAAG TAGATAA

SEQ ID NO:807: (Length of Sequence = 369 Nucleotides)

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GGCAGATATA ACCTTTTC TC AAACATCTCT AATTGTCTGC ATACCCCACT AATATTGGCT ACATAATACA TTTATTTTGT  
 TCTTTTGGGA CTAAGTGCCCT TACTTAGTTT TGNCAGTGT ATTCAATTAAT TGAAGAAATA CTTATTCAGG ATTTCTATTA  
 CTAGTTTTC CTCAATATAT TCACTAATTG AAGAAATATT TATNCAGGAC TTCCATTATA TGAGCACTGG CCTTTGTGGT  
 ACAAAGATAC AACATGAATC TGAAACTCAA TTTAATCTAG AAAGATTTAT TAATATAANC TCATCAGAAA AGCAAGNCAT  
 CTACTGTGAT AGCTACAGTA TTGGTTAGAA ATGGAAAGAG AGAGCAGAT

SEQ ID NO:808: (Length of Sequence = 361 Nucleotides)

CAGGCTTTGT ACCAGCCGCC ATACTCTCCA AAAGATGTCC CATCCTTTTN CTTTCCTTTC CATTCCTCTC TTTCTTCAGC  
 ATGCATCCAG ATGGGTTTAT TTTTCATCATC TACAGAACCA AACTCCCTTT CATGTGCACG AGTGAGAATC TCTTTGTACA  
 GGTGTTCTGC TTGCTTGAAC TTTCTTGTGTT TCAAATAGCA GGATGCCAGG TTATTTTNCG TCTTAGCCAC GTTGGGGTCA  
 TCAGGTCCCA GTTTTGTCTG GTAGATCTCG AGGGCTCTTT GATAATAATA TTCTACTTCT TCATACTTGC CCTGGGTTCT  
 GGCACAGTAA AGGCCAAGTT ATTTAACTGC TTGGCAACAT C

SEQ ID NO:809: (Length of Sequence = 353 Nucleotides)

CTAATTTATC TTCATGTCCA GTGAGCAGTG TTGCGTTTTT CTTGTAGCA TTTGGAAATG ATTTACTGGA ATTACAAAAC  
 CTATTTTCCC TTAAATTTTC AGCTTTGGCT CTGGCTGCTT TTTAGAATAA TGCAAGATAA AAATCACACC TGAGGGCTGA  
 AAACGAGAG GGAATGGGAG ACTTGATATT TAAGCAGCTT GAATGGTTTT CQNTTNCITT ATTTTAAAG AAATGCACCT  
 GCCTATGATA CTGTCTCTCC AGTGAAATGA TTACTCTCC ATTACTCTAT TGATACANTA TTGTGCATGC TAGTGTGTGA  
 TTTCTATACA GTAGCTTGAA AATTGATTAA CCT

SEQ ID NO:810: (Length of Sequence = 296 Nucleotides)

GAGGTCAATG CTTCCAGGC TCGAGTTGAT GCCCAGGT GTATTGTACG AGCATTGAAA GATCCAAATG CATTTCTTTT  
 TGACCACCTT CTTACTTTAA AACCAGTCAA GTTTTGGAA GGGAGCTTA TTCATGATCT TTTAACCATT TTTGTGAGTN  
 CTAAATGGC ATCATATGTC AAGTTTTATC AGAATAATAA AGACTTCATT GATTCACTTG GCCTGTTACA TGAACAGAAT  
 ATGCAAAA TGAGACTACT TACTTTNATG GGGAAATGGCA GTAGAAAATA AGGAAA

SEQ ID NO:811: (Length of Sequence = 493 Nucleotides)

CCAGGAGCTT CTCTCTCTT GCCAGGGCTA TGAGCAGAAA CCTCAAATAA ACCCTGGGCA GAGAAAACCA ACTTAATGAA  
 GAGGACGTTG CTGTTCCAC TGGCTTCTAA TTTTGCAGAT GCAATGAGCA CTTACGGCTT TTGCACTGGT TCAGGAAAAG  
 GCAAGAAGAA GCAGATTGTC ATGTTCCAAA GCCTCTGAT GGCTGCATGG AGCCAGCGGT GCTGTGACTT TTTTAAATAG  
 TTTCAGTACC TTTNATACGT ATGTCCTTAT TTAATCTTAA TCTATGCTCT CTCTCTCCCA TCAGCCTGGG AGCTCCCTGG  
 GGCAGGTCTG TTTCTCCCT CAGTCCGGA NTTCGCAGGA GCTGTGCTC CCCATCACA CTGGAGGCT GTCTNAAGGC  
 AGGGGCTGTG GTCTCTGCCA TTAGACTNGA AGCTCCCAA GGTAAAGGT CATATCTCA AAAAAGCTTA GAATAGCTTA  
 GGAACCTAGG GGT

SEQ ID NO:812: (Length of Sequence = 337 Nucleotides)

AAATTCACAT ACTTGTAAGT NATGCAAGCA AATTCTCACA TAATTATTTT TAAATGCTAG ATAGTTGGTA TAATTNCAAT  
 CATTTTAAAT ATGTTAAGAC TTGTTTGTGA CCTAACATG AGGTCTATNC TGAAGAATGT NCCATGTGCA CTTGAGAAGA  
 ATGACTGGAG TGNCCTTTAT ATGTATGTA GGTCCAATTA GCTTATAGAA TTGCNCTAGT CCTCTATTTT CTTATTANC  
 TTTTGTGTTG TTGTTGINCT ATCCATTATT AAAAGTGGG TATTGAAGTC TCCTACTATT ATTGTGCTAT CATCTCAGC  
 AAATAACAC AGGANCA

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SEQ ID NO:813: (Length of Sequence = 310 Nucleotides)

AGGTGGCCTC AGNNCAGCCA AGCTGACCTT GGCATTGGC TGGCTTCNT AAGGCANTAG AGTGCCCA CAATAAGCNCA  
 CCACCTNTCC CCACCTCCTC CCTTCTCTCC CATGCCACCC CACTTGCTTC CAAGGGCTTG GTTCCAAAG TNACATCCAG  
 GGTGTAAGAG GTTGGGGAAA ACGTCCTGCA AGNTGGCTCA GGGATCTNAT TCCATCAGAT GGTCTCATGA ATACTGTGGG  
 AGATTAAATC CATCTCAAAA TAGGCAACCA ATGCTATATT CTGAATNINA GGTCTCTGGA CTGAGTCCCA

SEQ ID NO:814: (Length of Sequence = 361 Nucleotides)

GATTTGAGCC ATCAGAATTC AGCTTTTGTGATAAAGAAT ATGAACATA TGAATATGGA TGAATTATT GTATATAGTC  
 AGCTTGCTGA ATTATTGGTT AAGCACTACT AACTATATCT TGGTAACTA TGGTGCAACT GAGCCACCCC CTAAAAGCAA  
 AAGACATTTA GCAGTTCACC ATATTTTGCA ATTAAACAAA TGAGAGCCTA TGAGANTGAA ATGNTTTCAG GTGGAGTTTG  
 ACAATACAAT TCATCCNTAA TATATAGGNN NAAATATTTT CTCAAAAATA ACATCTATGT GGTAGGNCCT TAAAAACGAT  
 GGATGNAATG CATGCAAAAT TCTCTGGTAC ACAGACACAT G

SEQ ID NO:815: (Length of Sequence = 301 Nucleotides)

GAATTINACT CTGTTTTCCC AGGCTGGAGT GCAATGGCAC GATCTTGGCT TACCGCAACC TCCGCTGCT GGGTTCCAGC  
 GATTCTCCTG CCCCAGCCTC CTGAGTAGCT GGGACTACAG GCATGCGCCA CCACGGCCAG CCAATTTTTC CATTITNAGT  
 ACAGACGGGG TTTACCATG TTGGTCAGGC TGGCCTCGAA CTCCGACCT CAGAGGATCC GCCACCTTG GCCINCCAAA  
 GTGCTGGGAC TACAGGTGTC AGCCACCACA ACCGNCCTAA TTAATACTTC TTGAAATTTT A

SEQ ID NO:816: (Length of Sequence = 310 Nucleotides)

ATCTTTAACA TATTAAATA GACATGAGAA AAATGTGTCA TTGTATAAAA TGGGGGAAAT GTAATAAATG ATTACCAGAA  
 ATATAAAATT AAGCCGTATA TGCNCTTAAG TAAATCGAAT CTAGGCATCC TTAAAATGTA AAAAAGGNTG CAACAAGAGT  
 AAGNGCCCA GAATGATGTA AATTACAGGA ATGGGGTGTA ATGTAACCTC TAGAGGAGGT GATGTTTAGA AGAAGCAAAG  
 NGAATGCAAT GANGAAGCAA ACTTGTTTGA GGCAATNCT CCTGGGAGTG GGACCAGGCA GCCCCCTCTT

SEQ ID NO:817: (Length of Sequence = 225 Nucleotides)

TGGCATGCGC CTGTAGTCCC AGCTACTCAG GAGGCTGNGG CAGGAGAATN CCTTGAACCC AGGAGGCAGA GGTGCGAGTG  
 AGTCGAGATT GCACCACTGT ACTGGTCTCA GCCTAGGCAA CAGAGCGAGA TTCCATCTCA AAAAAAAAAA AAAGTTAAAA  
 NTAATATGCT AACTATGATA CAACTGATA GCAATATTGT CTTTAGATTG AAAATAAAAA TAGGG

SEQ ID NO:818: (Length of Sequence = 225 Nucleotides)

TTAAAAAAC CTGTAGTTTC ATTACCTTTT TGAATAATGN CATACAAAA ATGTATTGNN TTTTGTGTC TGTGAGAATT  
 GATGTTTGTA GATTAAATAT CATTGTGTTT AGAATTACAA AATAGTTTTT AAATATTGTC TGAGAAAAGC CAAAGTTAAT  
 GCAACCNAGT GGAACTGTA AGACCNTTTG AGTATTGTTT GTTTTATTGG ATGCATTGG ATTTT

SEQ ID NO:819: (Length of Sequence = 280 Nucleotides)

TTGACTAGCT TCCTACGTCA TTAAAAATTC TTAAATAGT CTGTCTTAAT GGCTGCAAAT TTTGTCGTAA GTCTGGGCTA  
 AAATCTGATG AAATGTTTTA CCTGTGGTTA AGTAATTTAG CAACTCGTAT CTTTTTAAAA TATTACAACCT GGGNATTCTA  
 GTACGTCACA AACATTTGTN ATATCATTTA TTTTGTGCCA TTGTCGTGTC TATGAAATAC AGTAGAATGA AAATTTACTT  
 CAAAGCATTC ATTNTCTTCC CCCAGGGNAT GATGGCAAAA

SEQ ID NO:820: (Length of Sequence = 328 Nucleotides)

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CCAGTTAATT TTGTAAAGTT TATAGNGATG GTTTCAGTTA GACCTGTGCT GTCAATACAC TAGCAATTCA CATGCACATT  
 TAANITTTAAA TCTAAGTTTA AATTTAAATT AAGTTAATAT TAAATAAGAT TTGAAATGCA ATTCTCAGTC CTACAAGCCA  
 TGCTTCAAGT GCTTCATATC CATGTGAGGT TAGTGGCTGC TATACTGGNT AGTGCAAAAA GAGAACATTA TTGTAATCAT  
 AGAAATTCTA TTGGTAAGTT TATGGGGTAG TACATGGACT AGAATGTAGT GAGGTAGTGA GCTGTGGATG CAGAGAAAGG  
 NCACTGGA

SEQ ID NO:821: (Length of Sequence = 310 Nucleotides)

TCAGCATTGT TTCTGTATG TMTGAGATG ATTATTGGT TTCTCTTTT ATTGTGTAA TTTGGTGAAT TGCATCANCT  
 TTAGTATCTT AAACCAACCT TGCTCTCTA GGTAAACCT TAGTGGTCA TAATATATAA NCCTTTAAAT ACATTATTGG  
 ATTNCTTTTT TTAATATATT GCTGAGGATT TTTCATGACT ATAATCATAA GAGATATTGG CATATGATTT CCTATACITG  
 TAATGNCITT GTTAGAAGGA GTTTATATTA GGNITATNC TGGCCTCATA AAATGGGTTG AGAAATGTCC

SEQ ID NO:822: (Length of Sequence = 372 Nucleotides)

GCCAGATTGT NITCCTTGCG AGCCCCGAC CCGGGCTACT CTTCACCAGA CACGGCCCCG CTTTGGCCCA CAACACAGCC  
 GTCCACCCC TGGTCTCTC ACCITAGCAG TAGCAGTACG TCTGGGTGA GTTCCAGAG GAGCTGACAG GCCCTCTGCC  
 ACTGCTGCCA CCCCCAGGSC TAGGGAGGGA ACAAGAGCC TGCTTGCTGT GCTTGACAT CCAGCATGCC ACAGCTGCAC  
 TACGGNGAGG AGGTCAGACA GTCCCCCAA CAAGNCCCCG ATCCCTCTNC TCTCCACCAG GGAGGGCCCT GGGCTTTGGG  
 CCCACAGNAC AAAACGTTCC ANCCCGGGCT GATCAITCTG GGTGGCAGC GG

SEQ ID NO:823: (Length of Sequence = 288 Nucleotides)

AGCTGGCATC CCTGGGGAAA ACCAACGAAC AGTCTCTCA CAGCCAAATT CACCACAGTA CTCCAATCCG NAACCAAGTG  
 CCGCAATTAC AGCCCATCAT GAGCCCTGGG CTNCTTCTC CCCAGCTTAG TCCACAACCT GTAAGGCAAC AAATAGCCAT  
 GGCCCATCTG ATAAACCAAC AGATTGCCGT TAGCCGGCTC CTGGCTCACC AGNATCCTCA AGNCATCAAC CAGCAGTTCC  
 TGAACCATCC ACCCATCCCC AGNGCAGTTA AACCAGNGCC AACCAACT

SEQ ID NO:824: (Length of Sequence = 325 Nucleotides)

CTCTGAGGT CAAAGCTGCA CGTGGGGAAG AGAAAGACAA GGAGACCAAG AATGCTGCCA ATGCCTCTNC ATCCAAGTCG  
 GCCAAGACCG CCACTGCAGG ACCAGGAACCT ACCAAGACGN CCAAGTCATC TGCTGTGCCC CCAGGCCTCC CTGTGTATTT  
 GGACCTGTGC TACATTCCCTA ACCACAGCAA TAGTAAGANT GTTGATGTGG AATTTTTCAA GAGAGTGCGG TCTTCTACT  
 ACGTGGTGAG TGGGAATNAC CCTGCTGCTG AGGAGCCCAN CCGGGCTGTC CTGGGACGCT TTNTTTGGAA AGGAAAAGGC  
 TCACT

SEQ ID NO:825: (Length of Sequence = 318 Nucleotides)

AATCAGCCCT ACAGCGATTG CTCCACCCCC ATTAGCAAAT ACCGTAATAT ATGNTCTTAG TAATCATCCT CTCACAATTG  
 TNCITTTTCT AATTNNCCG TGAGTCAAGT TTCTTGACCA CAATGTTATG CTGAGGAAGA TCTAATGTTT TCCATGGAGC  
 AGAAATTGTT AGTCTCAAC TCCAAGGTCT GCCTGTGCAA GCCCTGTTN CCGTGTCTC ATAAACCTTG TCAGGCATTT  
 ATTTATTGAG CACATATCTA CTGINTCTG CACAAGAAIT CATAAGGTTT TGATGAATTA TGTCCCTTCT GAGTGGGA

SEQ ID NO:826: (Length of Sequence = 287 Nucleotides)

TACAGACTCA GGTATAGGG TGINATTTTC TAAGTCAATA TTCAGTTTCA CAGCCAGAAT CTGTGAAGAG AGAACAACC  
 ATGAGAAAAC TAACANTTTT ATGGTGATTG AGAGGTTCCA AGTNCCTGNN GTTTTAAAAA AATCAGTTTT TAAAGATAAA



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CAAACCTAAAA CTAGTCCAAG CACTGAGACA GAGTATTAAA AGATGGTAGC ACACCCAAAG NGCACGGTGG GTCTTGAATA  
GCTAACATGT TTCAAGTAGT GGAGGNAGAT GTGCTTAAAT AGTTACC

SEQ ID NO:827: (Length of Sequence = 426 Nucleotides)

TTTTTTTTGT TTTGGGACAG AGTCTCACTC TGTCACCCAC GCTGGAGTGC AGTGGCGTGA TCTCGGCTCA CTGCAAGCNC  
TGCTTCCCGG GTTCATGCCA CTCTCTGCC TCAGCCTCCA GAGTAGCTGG GACTACAGGG GCCCGCCACC ACGCCCGGCT  
AATTTTTTTG TATTTTTAGT AGCGACAGGG TTTCACCGTG TCAGCCAGGA TGGTCTCGAT CTCTGACCT CATGATCCAC  
CTGCCTCGGC CTCCCAAAGT GTTGGACTAC AGGCATGAGC CACCGCGCCC GGCCGGATGG TTAAAACATT TTAATAATA  
ATATTTAGTG CTAAGACAGG ATATGGAGCA ACAGGAACCT CTATATGCTT GCTGGTGGGG AATGCAAAAT GGGTACAACC  
ACTTTTGGGA CAAACAGTTT TAGTAA

SEQ ID NO:828: (Length of Sequence = 402 Nucleotides)

GGCTGCTGC TCCACTCAA CAGGTATCTG GGAGCCAGCA CTCGGCAGT CCTTCTAAGC TCTAACTCTG GTTTTACTGT  
TTTNNAGGTG AAACCTTTGT CTTGGGAAT AGTCTGGCCC GCTCCTTGA ACCACACTCA GACTCAATGG ACTCTGCCCTC  
AAATCCCACC AACCTTGTCA GCACCTCCCA AAGGCACCGG CCTTGTCTT CATCCTGTGG CCTCCACCA AGCACTGCCT  
CAGCTGTGG CAGGCTATGC TCCAGGGTA AGCTTACCAG AGTCTGGCC CTNCTTCCCT CCTCACTCT TTCTTCACT  
TCCTTCTGA GCTCTGGGAG GCCAGAGAGG ACCTAGCTCT GTTGCCTCT GNTCTGTGGT GGGGACTAGG GACTGGACTT  
AA

SEQ ID NO:829: (Length of Sequence = 417 Nucleotides)

ATCGGTAGG AGTCGGCTTT ATGTGGGAAG AGAGAAAAA ACTTGGTGAA ATGCTTTCTG GACTAATTGA AGAAAAATGT  
AAACTACTTG AAAAAATTAG CCTTATTCCA AAAGAGTATG AAGGCTATGA AGTACAGTCA TCTTTAGAGG ATGCCAGCTT  
TGAGAAGGCG GCANAGAAGC ACGAAGTTTG GAGGCAACCT GTGAAAAGCT GAACAGGTCC AATTCTGAAC TTGAAGATGA  
AATCCTCTGT CTAGAAATAG AGTTAAANGA AGAGAAATCT AAACACTCTC AACAAGATGA ACTGATGGCA GATATTTCAC  
AAAGGATACA ATCTCTAGAA GATGAGTCCA AANTNCCCTC AAATCCACAA ATAAGCTTGA AGNCCAAAAT CATTCTNGCA  
AGGTTTCTTC CCAATGG

SEQ ID NO:830: (Length of Sequence = 404 Nucleotides)

GGTTTGAGAG TAGAACAGGA AGTTGTAGT AGAGCCTTGA AGGAAAGAGA ACAGCAGGTG CATGCTTCCC CAGGCAGGAC  
TCAAGGTAGC CACTCAGGCA TCAGAAAGAG TCAGGCGGCC ATGATGGCTC ACACCTGTAA TCCAGCACT TTGGGAGTCT  
GAGTCGGGTG GNTCACCTGA GGTGAGGAGT TOGAGACCAG CCTGACCAAC AGGGTGAAAT CCTTCTCTA CTAACTACA  
AAAATTAGCC AGGTGTGGTG GCACATGCCT GGGACAAAT TGGGATCAGT GTTCTCCAGT CTGAACATAG TCTTCTGTTA  
CCTGGGAGAG AGTGGTCAGG TACTTCCAGC TTCAGGGCAG CCAAAGCAT TGACAAAACG ACAGGTAGGA TGGGGGAGT  
AAGT

SEQ ID NO:831: (Length of Sequence = 330 Nucleotides)

AATTTCACAG GTTGTGCTT CTGAAATCTG TACCTTCTTA CTCATAACAT TTAATGTAGC ATTTCTCAAC CTGACCAATC  
TGCAGAAAAT ATATGTCATA TATTAATTGT GTATACATGA ATATATGCAT TTCTCTGGTA AAAAGTCATA GTTTTNCATA  
GATGTCATGT AATCTTTTAA GAGATTCTCA AATAGGAACA TGATTCCACC CCAATAATGG TGAAAAATGA TCAATTAGA  
TGAAAGGGAC CTCAACAAGC CTCTGAGAT ATGAANCATA AAGAGNAAAT ATAAGCCGCA ACTTTTGTGAC ATGACAGATT  
CATAATGGTT

SEQ ID NO:832: (Length of Sequence = 402 Nucleotides)

CTGTTTCTC CTTTGTGTTT CCTATTATN CTCCAGTGC TAACITGATA TCINCTTGTG TGTACACGTG TGINGTGTG  
CAAATATATT TCTAGGAACA AGAGCAAACA TTCTAGTAAC TATCATTCTC TGATGTGGAG AACITGGGCA GAGATCTGAG  
TTACAGCTTT GTGGATTAT TCTCTGAT GAGAGATCGC CCGTTAGAAT GTCATGGTCC TAACCCCGTC ATGGATACCA  
GGGGTGAATG GCAGGGTCT TCTCTGCCC AGGAGGAAGG GTATGGGGAG CCGTGCATC TTGACTGTCA GGTCACTGT  
CTTACCACCT TTACAGCTAG GCTTCTGAG GTGCCAGCGT CTCTGGGAA TTCAAACGTG AGTTTAGAGG CAAGCTGGGT  
GA

SEQ ID NO:833: (Length of Sequence = 398 Nucleotides)

AGCCTTTTC CAGAGATCAG ACCTCTTAG ACATCTGAGA NTTCATACAG GAGAAAAACC TTATGANTGC AGTGAATGTG  
GAAAAGGCTT CTCCAGAAC TCAGACCTCA GTATACATCA GAAACTCAT ACCGGAGAGA AACACTATGA ATGCAATGAA  
TGTGGGAAGG CTTTACAAG AAAATCAGCA CTCAGGATGC ATCAGAGAAT CCACACGGGA GAGAAACCTT ATGTATGNC  
TGACTGTGGG AAGGCTTCA TCCAGAAATC ACATTTCAAC ACACATCAGA GNTTCATAC TGGAGAAAAG CGTATGANT  
GCAGTGACTG TGGGGAATC CTTTCACTAN GNVAGTCACA ANCTTCCATG TGCAACAAAG GNTNACANC CGGGAGG

SEQ ID NO:834: (Length of Sequence = 394 Nucleotides)

CTTTTGTGTT AGTCTGTAAA ATCATTTCOA GGTAATCT AGAGCTTAAT CCATATGNG TGCCATCTTT TGCTTTTCCA  
CACCTCTNAT CCTAGGTAAG TNAGAGCTAA AGATATTIN CTGAGCTTCT ATATGGGCC CAGCATATGT NATAATTCCT  
TTTACACATA GGAATCTGAG GCTTAGAGAA GTTTACTGAT TTACCTAATG GCACACATA AGTNGTGGG CTAAGATTTA  
AACTCAGGTC TCTGACTTA ATTGAGATGG TCAGCTCGAT GGTAAATATA ATAATATTGT NGTTGTGTT GTTGTGTTA  
TNIATCAACA ATAGTAGTAG CTAAGTCCAT TTCATGAAAC AGCTCATTGG ATAGTCCAT NTGGATAATT CTGA

SEQ ID NO:835: (Length of Sequence = 422 Nucleotides)

GCTTCTGCC TCIATAGATT TGACTATTCT GGACCTTCA CATAACGGA ATCATGTAAT ATATATAATA AGCAAAAGST  
AACAACAACC AAGCTGGCAA TTTGGTTGAT GAATGANTAA ACAAATGTG CTGTATCCAT ACAGTGGAAA TATTGGTGCC  
TACTACATGT GGATGGACCT TGGAAACATC ATGCTGAGTG AGAGAGAGCC TTGGTATTGT TTCATCTCCC CAGGAGATTC  
CAAGGTGCAG CCAAGGTTGA GACCCACTGA CAAGCAATGG ATATGGTTGG GTGCAGATGA AATAAGGCAG CCAGGGGCAG  
GAGGGATGTC TCATTGAAGA TGACTGTTT GTGGGATGCC TAGCAGGGGT GGGGGGATGA GGTATTGATA ACCAGCAACC  
CCAATCTTCA ACACAGCGTG GA

SEQ ID NO:836: (Length of Sequence = 408 Nucleotides)

CTCAAAAGAG TTGGCATCTC AGAAGGGAAG TGTAAGTINAG ACAATTGTCA TTGATGATGA AGAGGACATG GAAACAAATC  
AAGGGCAAGA GAAAAATTCC TCCAATTTTA TTGAACGAAG ACCTCTGAG ACTAAAAACA GAACCAATGA TGTGGATTTC  
TCCACTTCCA GTTTTCAAG AAGTAAGGTA AATGCAGGAA TGGTAAATAG TGGTATCACC ACAGAACCAG ACTCTGAAAT  
TCAGATTGCT AATGTTACAA CTTTAGAAAC AGGTGTAAGC TCTGTGAATG ATGGCCAATT AGAAAATACT GACGGGCGAG  
ATATGAACCT AATGATTACA CATGTAAACA TCACTGCAGA NTACCCACTT GGGAGGATTG TCTCTAACCG GCACTGCAGT  
CCAAGTAA

SEQ ID NO:837: (Length of Sequence = 347 Nucleotides)

TCGCTCTGTT GCCAGGCTG GAGTGCAGTG GCACGATCTC AGCTCACTGC AACCTCTGCC TCCTGGGTTT TAGCGATTTC  
CCTGCCTCAN TCTCTCAAGT AGCTGGGATT ACAGGCATGC ACCACCACTC CTGGCTAATT TTTGTATTTT NAGTAGAGGC  
GGGGTTTTC CATCTGCCT AAGCTGGTCT CGAACTCTG GCATCAAGTG ATCCATCCAC CTTGGTCTTC CAAAGTCTG

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GGATTACAGA CGTGAGCTAC TTCACCTGGC CTGTGTGGCT CTTTTCACAA AAAAGTTTAC TNGACTCTTG CTTTATTGCA  
AGTCCCAGAA TGGATTGTGAT TTAGGGA

SEQ ID NO:838: (Length of Sequence = 275 Nucleotides)

AATTGCCAAG GAAAATTTTA TTTTAGCTTT GCATTACAT ATTCTAAATA ATCCTTTCAC TTAATGCAAT CAGATTCTTG  
TGACAAGCCA AATACTGTGT TTTTGTGTG TGTTGTGTTT CCCTTCACCT TTCATTGTAT GCCCTTCAGA AAAATCTGAG  
AAGTGGGCTT CCATTTTGA AAAACAGGAC TTCTTAGTA CCATAGATAC GTAGATTGCA ATTTNCCTTT TCCTGCAGCA  
TACTGACCT TGTGAAATGA TGCCTATGGA TACGG

SEQ ID NO:839: (Length of Sequence = 387 Nucleotides)

TTTTGTGNTT GTGTGTAGAG ACTGGGTTTT NCCATGTC CAGGCTGGTC TTGAACCTCT CGGCTTAAGC NATCCTCTTG  
CCTTGACTTC ACAAAGTGCT TGANTACAG GTGTGAGCTA CCACGCTGG CCATGTTTTT TGTGTGAAG GATCTGTGTA  
GTTTTATATC TTTCTGTGGC TCATATCTAA TTTAGTTGAC AGTACCTGTG GGTCACTAGG TAGACATTGC TAGCAGAGCT  
TTAGAAATGA AATACTAGAG CTGTGGAAAA AGTTGATATT TGAGATAGAG ACTTGAAGAA CATTAGCAGA GAGTTGGTAG  
TTAAGGTCTG TGAGCTGGTG AGCAATTCAA AATAAAAGCA GAAGAGAAGA GGAAGACAAG GGTCAAC

SEQ ID NO:840: (Length of Sequence = 367 Nucleotides)

GTACTAAAGC CATGCAGGAA GGAGGAAATA ATCAGTGAGC CACGGGCTGA ACTTGTGGAA AAGAAATGGA GGGCAAGGTC  
ACAAACCACT CCTAAGTGC TTCTAATTTA ATGTAATCCT CACTGTTTGT CATTATTGCT TTTNATGGCC ATGAAATCTG  
TTTTTCCCA GINCTCTAGT GTAATTTGGA ATTAATTTCC CAGCTGCTTT ATTTTTTTCC TAGAAGAGTC GGGGACATTT  
TCAGGATTAG TAGAGGTGTT TCTACAACAC CTTTCATGCT TCGATAGTGT GTAAGAGTTC ACCAATTGAN TTACCTTATT  
CTGTTTCAGAA GTAGTAACCTA TGGAGTTTAA CCACTCTGGG ACATAAT

SEQ ID NO:841: (Length of Sequence = 346 Nucleotides)

TGGAAGGAA AAGCAAAAGA TTGAAGAATA AAAACATTTT GTATTTGCCA AAACCTGTNC TGTAGCAGTA AGTGTGAAAC  
AAGTTTGCTA CATTTTCCTT TTGGTTTTTA CTGGTTGGG GCTTTTTTGT TTGGTTGGTT TTAAGGATT TAGGGGATTG  
GCAAGTCAGT TTGTCAGATG TCAATGAACA GAAAACCTAA GAAAAAGGT AGCAAAAGTN CTGCTGGCCC CAGATGGATT  
TTNCCTTAAG TAATTTCTTA ATCATTAGTT ACAGCTCTGT GTCAAAAGAT GTACATAGAA ATTTATGCTA GATTCTTAAC  
ATCTTTCCTT ACTGTGTGCA GAAATG

SEQ ID NO:842: (Length of Sequence = 326 Nucleotides)

GTTCTTTGAA ACAAACGAGA ACAAAGACAC AACATACCAG ANTCTCTGGG ACACATTCAA AGCAGTGTGT AGAGGGAAAT  
TTATAGCACT AATGCCCCAC AAGAGAAAGC AGGAAAGATC TAAAATTGAC ACCCTAACAT CGCAATTAAA AGANCTAGAG  
ANGCAAGAGC AAAGACATTC AAAAGCTAGC AGAAGGCAAG AAATAACTAA GATCAGAGCA GAACTGAAGG AGATAGAGAC  
ACAAAAAACC CTTCAAAAAA TCANTGATTC CAGGAGCTGG TTTTGTAAAA GTTCAACAAA ACTGATAGNC CACTAGCAAG  
ACTAAT

SEQ ID NO:843: (Length of Sequence = 380 Nucleotides)

GGCCTTCAAA TTCAAAAAAG CAATTTACAT TATAGTAATA GTTCATGTTT ATAGTACAGG AACAAGAATG AGTTAAACTA  
AATATTCCAA ATCAGTACAA GTNATNCCT TTTTTTTTTT TTGAGACAGG GTCTCACTCT GTACCCAGG CTGTCTTGCT  
TTGTCAATCA GGCTGCAGTG CAGTGGAGTG GTCACAATC ACTGCAACTT CAGCCTCCTG GGCTCAAGCA AGCCTCCCAC

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CTCAGTAGCC TCCACTCCT GATTAGCTGG GACTACAGTG AATGTGTGCG CATGCCCAGC CTAGTGGTAT TTTTAACAGA  
TAANTAAGAA TGGAGGTAGT GCCAGAGGTG GAGTGAGAG AGAGACANGT AAAATATAGG

SEQ ID NO:844: (Length of Sequence = 257 Nucleotides)

TTTCCCTCTC GTTGGCCAGG CTGGAGTGCA ATGGCGINAT CTTAGCTCAC CACAACCTCT GCCTCCCAGG TTCAAGCAAT  
TCTCTGCCT CACCTCCCG AGTAGCTGG ATTACAGGCA TGINCCACCA CGCTGGCTA ATTTINTATT TAAGTAGAGA  
TGGGGTTTCT CCATGTGGT CAGTCTGGT TCAAACCTCT GACCTCAGGT GATCTGGCCA CCTCGGCTC CCAAAGTGCT  
GGGATTACAG GTGTGAG

SEQ ID NO:845: (Length of Sequence = 420 Nucleotides)

CTACACACAT CTTGCATTAC CTGGCAGTAA GCTTGGAGAG TAAGTTTTC AGATGCAGAT CAGAAGAGAT TAGGAAGAGC  
TTTGCAGATC ACCGCAAGTA TTTGTATTC ACTCTAAAT AAACAGAAAA CCCAGGAAGG GTTTTAGGCA GATAAATGGC  
ATTATTTAGT TTCTGATTT AATCATCAT TTAGGTTACT GGGGGAGGCT GCCCTGAAGT GGATCAGAAG TAAAAGGCAG  
AGATACCAGC TAGGAAGCTG TTGCAGTGAG CCAGGTGAGA AGAGAGGGCC ACCTGGACCA GGTAGAAGCA GTACAGGTGA  
AAAAANTCAG ACACCTCCAA ATCTTCTCA AGATTINATA CATTATTTGG CTGGGCACGG TGGGCTCACA CCCGTAAATC  
CCAGCACITT TGGGGAGGCC

SEQ ID NO:846: (Length of Sequence = 215 Nucleotides)

GNCTGGGTGA CAGAGTGACC CTGCTCAAA AAAACAGTGA TTGTTGTAA GGAAATTATT AAAACCTTGG TTCAATATCC  
AATATCTTAA CTTTAAATTT TCAATACTT CAAACTAGT AAGTATTACT ATGCTAAAG CACAGTGCAG TCCAACGGAN  
TATGTGAGCC ACATATATAA TTTTAACTAG GCCAGTAGTC ACATTAATAA GAAAA

SEQ ID NO:847: (Length of Sequence = 266 Nucleotides)

ACACGAAGAA TCTCTTCAT CGCCAAACAG CTTTCAGAGA TAGATGCTTT GTTCCAATC GAGCATGCTA TTCCAGTGTA  
CTGNACATAC TGTATACCTC GTGTAGGCA CTTTATGAA GAGATNAAGN CACTGGCATT TCAGTGGGAT TTTAAGCATT  
TTTAATAGCT TCATGTACAG CATGCTGCTT GGTGNACAAT CATTAATTCT NCGATATTTT TGTAGCTTGA NTGTAACCGN  
TTTAAGAAAG GTTCTCAAT GGTTG

SEQ ID NO:848: (Length of Sequence = 275 Nucleotides)

CNCTCGGTG CCTTTTAAA AATTACTTTT CAGCCGGGCA TGGTGGCTCA NGCCTTGTA TTCCAGCACT TTGGGAGGCT  
GAGGTTGGAG GNTCACCTGA GNCGGGAGA TTGAGATCAG CCTGACCAAC ATGAAGAAAC CCCGTCTCTA CTAAAATAC  
AAAAATTAGC CGGGGCTNGT GGCACATGNC TGTAAATCCAG CTACTCGGGT GGCTGAAACA GAAACCAACA ACNCTGACC  
TCAGGGAGAT GTCTAAGAGC TTCTGGCATG CCTCA

SEQ ID NO:849: (Length of Sequence = 318 Nucleotides)

GGATTTTNC TAGTGAGGAG TGGAGGAAGS GGGCTGGTG GAGGAGTAGC AGCCTTINCA AAGGCCCTGA GGCAGGAATA  
CCTGGGAAGT GGGGGCTGC TTGNTAAGA TGAGGCTAAA GAGGAAGGCG AGGCTTTACT TAGGAGGAAT GGGAGCCAC  
TGAGTGTAA AATTAAAAGC AGTGGGGCT GGGCACAGTG GCTTACACCT ATAATCCAG TACTTTGGGA GGCCAAGGTG  
GNTGNTCAC CTGAGGTCAA NGAGTTNAG ACCAGCCTNG CCCAACATTG GGCTCTACTA AAAGTACAAA AATTAGCT

SEQ ID NO:850: (Length of Sequence = 320 Nucleotides)

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ATGTCGCGCA ACTCAGGAGC AGGCGAGGAA TCAAACCTTTT TGGAGTTGCT ATCAAGTINCT TGATTTTNCA ATCCCAACCG  
 TCCGCAGAAC ACTAGATGTG TGNATGINTG CTGTGTGTG CATTGTGTAGT AAAGAGGGGG TTGAGAAGTG GAAGGCAGAG  
 NCAGGAGTNG GCATCTACCA NGGCATACAT NAAAGACCCT TACACCAACA CTGCCCTTCC CAGNAATGTG AGTGTAAATCT  
 GGTTTCCTAA AACCCCTGGGC TGCAGTCCAG ATAGTCATGG TTAGANCAGA TGGTTGAGGA AAGGTTCAAG GCAGTAGGAT

SEQ ID NO:851: (Length of Sequence = 170 Nucleotides)

CATCCAAGAT ACCAAGATAT ATGAGGGAAC ATTNNNTTAA ATAAAAAACA CAAAACCACA AATCCAAGAG GCTCAGNTAA  
 CCCCAGTAA AATATATACT AAAATACAAG NAAAAGGGAA AAAATGCATG NACACACACA TATAGGCATA TCATATTCAA  
 ACAGTTGTTA

SEQ ID NO:852: (Length of Sequence = 256 Nucleotides)

CAAAGTACAC ANGTGTATTT ATTACATTTT GCAAGCACTC TGTCTACAT TTCAAAAACG CCACNTCAA GCTGTGGCA  
 CATTATGTAA CAAAACAGAT TAATTGTAAT GCCTGCTACA AAGCACTCTG TGAAAATACA AACTCTAATA CCAGAAATAA  
 AAGCCAAAAG TGTCAACATC ATTACATAAG TNGAAAAGTC AGTTTNGAA ATTATCACA ACTGTTATGN CACGGAAGTG  
 AAATACTATA ATATAG

SEQ ID NO:853: (Length of Sequence = 281 Nucleotides)

GTATGNGT TCTCTCTCT TGTCTCTCT AGGATATTIN ATCCTTGACT TTAGGGAGTT TGATTATNAA ATGCCTTGAG  
 GTGATATTT TNGGGTAAA TCGGCTTGN GTCTCTAAC ATTCTTATAC TTAGATATTG ATATCTCCTT CTAGGTTTG  
 GAAGATCTCC GTTGCTATTC TTTTGAATAA GCTTCTACC CCATCTCTTT CTTTATCTCC TCTTTACAGC AAATAAAGTT  
 TTAGANTGC CATTINAGG CTATTTCTA GACCTGTAG G

SEQ ID NO:854: (Length of Sequence = 255 Nucleotides)

TCTGTCCAGG ATTATTACCA GCTAAACAN GTAATGGAGG TCTATGCCGT ATGAAGAACA CCTGTAAAAG CTGGAAAATG  
 TGGCTGTCTT CTCAAATGGG CAGATACCAG CACAANGATA CAAGGATTGT AAAGACTCAG AATCATGTTA CTTCCAGAAG  
 AAACANATA AGNTCCAACA ATGAACACAA NATAATANAA CTNAAGGANA TTTGGANAAC ANTGCATAAA CAAAACAAGT  
 TTAATGAATG ATTAG

SEQ ID NO:855: (Length of Sequence = 333 Nucleotides)

ATAGCTGTGG TGGTAACCCA CCAGAGTGAG CATGCTTINCT TCINAGGATA GACGTTGGGT AGTGGGATTG GGGAGAGGCA  
 GGACAGAGGC TTCCGTGTG TCTCTCTAAT TCATTGTTTC TTA AAAAGGA TTTGGGCTTA CAAGTTTCAA ATACTAAGAT  
 TINATAAAGT CACATGGATT TTA AAAAATC ACTCTATTGT ATGTTTGAAA CATTCCATAA TTAAATAAAA AGGATTGGTA  
 TTATATATGT NCTTGAGTTG CTATAATGTT TTACGGTTTT CCTTGCTTC ACTTTTGAAT TNINCGAGGA TCTCCTGGGG  
 GAAGNTTCAG TCG

SEQ ID NO:856: (Length of Sequence = 230 Nucleotides)

TTNAGACAA AGTCTTGCTC TGTACCCAG GCTGGAGTGC AGTGGCGCAA TCTCGACTCA CTGCAACCTC CACCTNCTGG  
 GTTCAAGCNA TTCTCTGCC TCANCCACCC AAGTAGCTGG GACTACAGGC ACGTGGCACC ATGCCTGACT AATTTTTTGT  
 ATTTTTTTTA GTAAAGACGG GGTTTCACCG TGTTAGCCAG GATGGTCTCG ATCTCTGAC CTCATGATCT

SEQ ID NO:857: (Length of Sequence = 334 Nucleotides)

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AAAAACAATT AGTAAAAATT ATGCATTAAAG GAATTATTTA CTAGACTTTT TGGAAGTAAA AAATAAGTCA GCTGGTTTTTC  
 CCTTTGANTT CCTATATATT AAGGCAGAAT TCTCTATACT GTCCACCAAA ATCATAGTTA CAACTGTTTA CTTGAAATGA  
 TTTATATACT GCATTGACCT GGCATGTTAA TATTTCCTA TAAATATCAC CACTTATCCC CATGCCCTAA AGCAGTTTTT  
 TTAAACCCAT TCTTTCTTGG AGAATAATTA TAATACCTTA AATACAGAAC TTTGGGTTTC TGATCTTGCC ATAGCCATGT  
 AGCACAGCCA CTGA

SEQ ID NO:858: (Length of Sequence = 301 Nucleotides)

GGAGAAACGC CTAATGTAGA TGATGGGTTG ATGGGTGCG CAAACCACCA TGGCACGTGT ATACCTATGT AACAAACCTG  
 CAGGCTCTGC ACATGTATCC CAGAACTTAA AGCATAATTA TAAAAAANTA AGAAAATGGA AATTGATTTT AAAAATTTTT  
 ACAATGTGCA TCAAAAGACA ACATTAAGAA AATTAACAGA NTGGAAGAAA ACATTTGCAA ATAATTTATC TGATGAGGGT  
 TTAATATCCA GAAAATATAA AGANCTCCTA CANCTCAACA GCAANAAAAG ACAACCCNAC T

SEQ ID NO:859: (Length of Sequence = 332 Nucleotides)

TGTCTCACC CATAGAGCTA TCAGAGGGTG CCTGCNATTG GCAGACCCCT TACATTTCCC TTTAATAAAT CACTTCCCTG  
 CCAAGATCTC TGTCAAGGTT TGAGAAGTCA GAGCATTAA TTTATTNCAA TAAATGGTAT GTACATGANC ATCAGCAAGC  
 TCCAAGAAAT GACTCGAGGG CCTTTNACTA CTCAGAGAAT AAAGCAAAAA TGCCAGGTTT TCAGTGCTTG TCTTTTGTC  
 CAGGGATTTG GACGTGTTTT TTGTTAAGTN CCAGCGTTGA GCTATGTTCC AGAAGATGGA GCCTCCAGA AATTAATTGT  
 AGTGCTTGAA GG

SEQ ID NO:860: (Length of Sequence = 233 Nucleotides)

AAACGNTATG TGATTTTAGC ATTACAACAG TAATTCAGAA ATATCTCANN TGTACATTG ATGTCATCAN TATTACAAAA  
 AAGGAAAAAA AAGTGACAGG CAACAGTGAA GAGCACCAGA GACCCAGCGC ACACCTAAAG TAGACCATGC TTCTTTCCTT  
 CCACTGCCAG GTTATCGTCC CGGGAAGCCC CCCACCCCTT CGCTTCCTC CTCGCGTTTC CCTAAAAAA NNG

SEQ ID NO:861: (Length of Sequence = 327 Nucleotides)

GGGCAGGTGT CAGCGCCCGT TTCACCGCCA CGTCGCGGAC ATGGTGATTT CAGAAAGTAT GGATATACTC TTCAGAATAA  
 GAGGAGGCCT TGATTTGGCT TTTCAGCTAG CTACTCCTAA TGAAATTTIN CTCAGAAGG CACTGAAACA TGTNTTGAST  
 GACCTGTCAA CTAAGCTGTC TTCAAACGCC CTGTGTGTTA GAATTTNCCA CAGTTCAGTG TATATATGGC CTAGCAGTGA  
 CATAAACACC ATTCTGGAG AACTGACTGA TGCTTCTGCT TGTAAGAACA TACTGCGCTT TATTCAATTT GAGCCAGAAG  
 AAGATAT

SEQ ID NO:862: (Length of Sequence = 378 Nucleotides)

AATCAGGTCC ACATTTGTTGT CTTGGATGCT GAGTTTGCTG AGGGTTTCCA AGACCACTCT CTGCGGGGAA AGGACGGCAT  
 TGGGGCCCAG GGTGGAAAAG GGTCTCTGGG CTTCACTGTA AGGGCAAAC TCCCACTGTA GGAGTCCGTC CAGGACAGGC  
 AGGCAAAATNC TCTCGGGGTA TGGAGATAGG TCCAACCTGCC CCGAGATGTT GGGAGTGTGA ACCAAGGTGT TTTCCCGGAG  
 CATCTCCAAG CAGTCCACCC ACCACTCCAC TTTTTTGAG CTCACCCCTT GGGTCTGTGT CTTNCTCCTT TTCATAAGTT  
 AGTGGTGCCT GCTTTCCGCT TCTGGGTGCT TTGTGGGTGC AGCAAGGATC AAGCTTTG

SEQ ID NO:863: (Length of Sequence = 374 Nucleotides)

TCAAATTAAT GGTTTTATTT CCATCTGTAA CACTAGCAGA GGAGTCCAAA GCAGACTGAT ATCCATGGAT ATAGTTTAAA  
 TGTAACAAAG AAAGAGTTGA ACTATGTACA TTGAAAAAG GAAGACATT TTTNCATACC AACCTTTCCC TAGTTCCGAG  
 TTTCTGAATA GTAGAAACAA AACACATTTT TAAATCTTTC TATCAATTTA ATTTAGGACG AAGTAACACA ACTTTTATAA

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TTAACCACTG AAGTNGTCTT TAAGGACAAA ACTTAAATTT TAAATGGGT GTTACCATAT TTATGAGTG GACTGACTCC  
AAGGTTGCCT TGCTCCAAGN NTGGGCATCG TGACATTGCC GTGATGCCCA GAGG

SEQ ID NO:864: (Length of Sequence = 223 Nucleotides)

AAGGGGATAG AGCAGACACT CCGCAGGTNT CTGAGATTG TCATCCGCTG AGGGTAGAGC TGAGGGTGGG AGGGGAGTNA  
GCAGACACTC GGAAGGTGTC TINAGGCTCA GGGAGTTATC AATTATAGAA TGTTGTTGAG TTGGAGGAGG TGGCTGGTGG  
CCCATCCTGT TTTTAAAGT TTCANCTGTG AGGTAGGGCC AGTAGGGCAA TCCTGAAGAA TGG

SEQ ID NO:865: (Length of Sequence = 228 Nucleotides)

GAACCCGGGA GGCAGAGGTT GCAGTGAGCA GAGATCACAC CACTGCACTC CAGCCTGGGC AACANAGCAA GACTCCGTCT  
CANAATTTTN CCAAATCTG ACGGAAAGAA AAGAAACAAA TGGTTCAGAT GGGACGGAGG GTGGGGGAGG GGGGGAGGTT  
GAGTAGGAAC CAGGAGGGCT GCCTGGGGTG GGGGAATAAN TTAATAAAG GAACGAGTTA ACAACAGC

SEQ ID NO:866: (Length of Sequence = 328 Nucleotides)

GCACCACGTC AGAGAGGCCC CAGGCCACTG AGCCCCGGAG GAGACCCAGC CGGCCAGCCA GATGTGTGCC TGANTGCCAC  
AGACTTCAAG CAGTTTACAA ACGAACTCA CTGTTAAAG CTGTTAAAT TCATTAAAC AGTAGACGAG TGCTTTAGAT  
TCTCTGAATA TCAAATAATA TATACAGATA GACTGAGAG CATGACAGTC TAATCTAAAG CATCTTTACA GATGCATTIN  
CTTGAATAAGT TAGTCTTCTT TTTAACTCTG AATCAGTGAT AAAATTGTTA ATTTGCAAAA GAGTACAGTT TTAAGCAAGA  
NTAGAGTG

SEQ ID NO:867: (Length of Sequence = 361 Nucleotides)

GTTCATGGC ATGTAATAAT TATGTGAAAT TCAAATTTTA GTGTCCCGAG TTCTACTGGA ACGCAGCCCC TATGTGGTTC  
ATGINTGCC TCCAGCTCCT TTCACACTGC AGCAAAGCAG GGAGTGTAAC GTACACCCCA CGGCCACGGG GCCTAAATA  
TTCTCTATCA GACCCCTAGA GAAAAATATG CCGACCTCGG ATGTGACTGA GGGTGGGGAC TTGGGTGAAT GCGGCCAGG  
AGTGACATCA AGGGTTTGAA GCAGACCCCT TGTCCAGGAG GGAGCGGAGG CAGAGCAGGG ACAGTAGTNA GGAGGCCATC  
TGTTGGTACT TAGGCAAGGT GAGGAGGATG TAGGAGGCAA G

SEQ ID NO:868: (Length of Sequence = 364 Nucleotides)

AAAGCAGCCT TCAGGCTACT CTCCTTGGN TCCTTGCTCT GGGGAAGAAC ACTCAAGCAG CTTTAGAAAA AGTCCACGTG  
GCAAGGAATT GTGGTCTTTT GCCAACAGCC ATGTGAGTNA TCCATCTTAA GAGTGGNTCC TCCAGCCCCA GTAAAGTGTT  
CAATGACAG CAGCCCTGGC TAACATATTG ACTGCAACTT CATCAGGGAA CTTGAGCCAG AAAAATCAG CTAACCTGCT  
CCTAAACTTC TGACCCACAG AAATGGTGAG ATAATGAATG CTTGTTTTAA GCTGCTAAGN TCTGGAATAA TTTGTTATTC  
AGCAGTAGNA TAACTAATAC AANGCCACCC AAGNATCAIT TCCC

SEQ ID NO:869: (Length of Sequence = 383 Nucleotides)

AGCGACAGAC AAGTGAGCAT CACTACCAGA GCTCTGCCTC CTGTCAGATC AGTAGCGACT TTAGATTGTC ATAGGACCAT  
GAACCTGTG CATGCGAGGG ATGTGGGTG CACACTCCTT ATGAGAATCT AATGCCTGAT GATCTGAGGT GGAACAGTTT  
CATCTGAAG CCATCCCTGT GCCCTACCT GTGGAAAAAT TGTATTCCAT GAAACCAATT TTTGGGGCCA AAAAGATTGA  
GGACCGCTGC TCTATAAGAA ACTATTACTG AAATAAGGTA TAAAGTCTTT ATCTTACTTA TATTTATATC CTCTATGGTG  
TCCACACACA AGGTGCTTTT TACACTTAAG TTGTTAACT AAAATATTNC TTTAACTTT AAT

SEQ ID NO:870: (Length of Sequence = 409 Nucleotides)

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CAGCTTTGCA AATCAAATAG AATTCAATTT GCCTCCNCTN ATCTTACAAC TATTCTCTGG AGTAGGCAGG CTGGTTGAAC  
 TTCAAGAGAA GAGGCGTTC TGAGAGCCTC CTGGGTGAGC TTGCACACCT GGGGGCCAGA TGINCTTTGC CCTCCTTGCA  
 AAGCCTCTCT AGTCTGGTGC CCAGAGAATA CAGCTTCAGC AGCAGCTCAC TTGCTTTTN AGTTTAGATG AGAAAAACA  
 GCAAAATAGT CCATCAAGGA CAAATCTTG CCAATGGATT TNCITTTGCA AGGANGTCA CCTTTGNCC TCAAGCATCA  
 TCTTTAAGTT GTGAATGCCT GATGGGAGGT CCAGGTTGN CTGTGGGAGG AGCTNGGGT GGNITCCAAA ACCACCTGGG  
 GACCAGTGG

SEQ ID NO:871: (Length of Sequence = 290 Nucleotides)

TCTTTGCATT GATAGATTAG TTATTTATGC CAGINGTCTC TGCTGGCTT GTTTTGGTTT TNATTGCATT TGTTTGCTAG  
 AGATTGTTT TAGTTTTNCA ATTTCTTTCT CTGTACACCT GCCCTCCCC CACCCACCA CTGGGTACT ACCTCCTTTT  
 TGGCACTACA TGATGCCTTA AGCCAGGNT TGCTAAGCT TTCATAACAG ATCCACGAC TGCTCATCCC CAGTGGTGA  
 GGTNCTAAAT GGGATAACCT GATAGTGTGG GAAGGCTGGC TGGGGTGT

SEQ ID NO:872: (Length of Sequence = 313 Nucleotides)

AAAACAAAAC AAATTTAAAA GCACTCAAAA ATAACCTCAA AAAGAGACTA GTGAGTGTC CTTAAGGAAA GCCCTTCTG  
 CAGATTCCCA CAGAACTGG CCCAGGCACT TAACCTCAT CTCAGCTCTG GTACAGCTCA CTGGGTACAG TGTGTACCA  
 ACTCTTATGC CTGGNCTGCT GATAAATCT ATTTATCTCT GAACCTCAAT TTATTCAAAT CTAGTTATGA TATATCATAG  
 TGCTTGTAAT TGTGTAAAA TATAGANGTA ACATACAGCA TGTGTCTACA CGNTTAATAA ACTGGTGCTA ATT

SEQ ID NO:873: (Length of Sequence = 300 Nucleotides)

TAGTAAACAA GTATTACTTC AACTGATACA ATGGCTACAT GACATCAAAG TACTATAAAT NATCAAACT ATCGT CAGA  
 AAAATTACAA ATTCGTGCA AAATACATTA TACTGCTACC ATTAAGAAA AAGTGCTTTT NGTTTTCTCT TCTTTCTTTT  
 TTTTTTTTT TTTTGCCAGA AAAGTATCT TNCATATAG AAAATCTAC ATGTTACCTT GCATGTGGCT AGGNTATATC  
 ATAACGGAGT TTGTACTGAG TCCTTCTGAT TTGCTGSATG AAGGGCTGAA AAATATATTA

SEQ ID NO:874: (Length of Sequence = 364 Nucleotides)

GAGTCATTGA TGCTGAGAGA TTGTNAAGAA TATACTGACA GCATCCTTGT AGCTGCATCA CAGTAAATCG GACTTCTGAA  
 TCAAGCAGCC CAGCCTAGCA GCTGATAAGA GTGAATGTAG GTGAGAAGCA TTACCTTATT CCTGTAACAA GAGAACTGTT  
 TTGTGATAAG TGAACTAGG AATGTAGAAG AAGAAATATC CTATGGCTAT TATAAAGAN GAAGGACTTG CCTGANTGAC  
 TTGGTGGTGC ACCAGAAAAT AACTTTCAGA AGAATGCTTT CTGTTAAGCT GCTGCATTGT TCCTGGAGGA AATGTTATTT  
 CTAATGCATG TTATTCTTC AAAAGATAGG ATAACAAAGA ATTG

SEQ ID NO:875: (Length of Sequence = 341 Nucleotides)

ATCAGTCCAA TGCAGATTAG TATCACTTTG CTCATAAAAG AGAGTATAAA GGTTCCTGAA GTTTTGTAAA GGAGCGGCTN  
 AGCTGACTGT TAAGGAAGCT ATCTTTTGT TACAAGAAAT TTACTTTTT CCTTCTAAA TTTCACAAAC AGAATATTAT  
 TAGAGACAAC AGAATACATT TACAAAAATG GCATCAGAAA TAATTGANTA CATTGTGTAC AATATCTNCT ATTAATGAAA  
 TAAATGATA TTINATATGA TATTTGGTCT TTATGGGAAA ANTAATATAA TTNCCAATAT TCTAAGGNTG ANCAAAGNG  
 GTTTACAAAT AGCATGCAAG G

SEQ ID NO:876: (Length of Sequence = 327 Nucleotides)

GTTCANCTT GTGGGTCAAC TTCTAATATT TGATGGTG3C TACACTGTGA CAAGAAAGGT TTTTINAGCTT GTTGGGGTCA  
 GTGGATGGGC ACAAGGGCAC CCAGTGGTGG TGCCCGNCC AGGGAGGAGA ATACATTGTA GAATATAAGG TTTGGAAGTC  
 AAATTATAGT AGAATGTGTA TCTAAATAGT GACTGCTTTG CCATTCATT CAAACCTGAC AAGTCTATCT CTAAGAGCCG



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CCAGATTTC ATGTGTGCAG TATTATAAGT TATCATGGAA CTATATGGTG GACGCAGACC TTGAGAACAA CCTAAATTAT  
GGGGAGA

SEQ ID NO:877: (Length of Sequence = 404 Nucleotides)

ATTTGGCTCC TGAATGTTGC AGAAACTGG TTTTGTACAC TGGGGAAGGA GAGAGTGAAG ACCCTCCAGT TGGTTCCTCA  
GTCAGCTCCG TCTTGGTGT CGCTTCTTG CAATTTTTT CCTCCCTGG CCTTCCTGT GAGGGTTAAA AGGGCCATCT  
CCAAGCCAGG TGGAGCCCCA ATCCATTGA CCAAGAGGSC AAGGTATGGG GTCACCTTCT CATGGAAGCC CTCCTCTAA  
AGGAGCCCCA AGGGGACACC TGCAGAGGGC GGGCTGTGAT CTGTGTGTGA ACTTCAACAA AATCTCAGGT TAGTATTTCT  
CCAAATTCAG TTGAACCAAG ATGTGGTATA CACTACAAA TGCAGATCT GGTGCCCTC TCCAAGAGTC GGCCTCAGTT  
AAAA

SEQ ID NO:878: (Length of Sequence = 340 Nucleotides)

TGTACCGCTG TGCTGTGGC ACGAACACCT TCAGGGACTG GAGCTGCTTT TATCCTTGA AGAGTATTCC CAGTTGAAGC  
TGAAAAGTAC AGCAGAGTGC AGCTTTGGTT CATATTCAGT CATCTCAGGA GAACCTCAGA AGAGCTTGAG TAGGCCAAAT  
NTTGAAGTTA AGTTTTCCAA TAATGTGACT TCTTAAAGT TTTATTAAG GGGAGGGCA AATATTGGCA ATTAGTTGGC  
AGTGGCCTGT TACGGTTGGG ATTGGTGGG TGGGTTAGG TAATGTGTTA GTTTATGNTT NGCAGATAAA CTCATGCCAG  
AGAACTTTAA AGTCTTAGGA

SEQ ID NO:879: (Length of Sequence = 372 Nucleotides)

GAAAAGATAA TGAAGGAATA ATGCAAGCT GAAGGCTGTG CCAGATGTAA GAAGTGATTA TGAAGGATAA AAGAAAAGGG  
CTTTCCAAGC AGGGAAGAGG CATCAGAGAG AAAACCAATT GTTGAGCCAG TATTCTGTCA CAGGGACATT TGCTTTTNC  
CTTTAATGCC CAGTAAGGGT CTCTCAGGT TCCATTAAAC ATGCAGAATC ACAAGACCC CCCAAAGTTA CCATGGTGCC  
AACCGACTCA AAACAATACA GACAAGAAGC TCAGTCTATC AGGAAGGCTG CAGCAGGCAT ATGGGAACCA TCTTGCTCCA  
CAAAGGACAG CTNAGATGGC AAAGATCCCT ACAAGGTCC ATATCCACGG GG

SEQ ID NO:880: (Length of Sequence = 405 Nucleotides)

GAGCTAGGCA CCAGGCATTG TGTGAGGCC CAGGAGTTTA AGAAATGAAT TAAATATTCT CCCCTGCCCT CTTTGAAGTG  
ACTCTAACGA GGAGACTTAA GANTTATTTT GTAATCTCTA GTTATATTIN CTGAATTTCA GAGCTTAAAT ATTATACTTC  
AACATGAGTC ACACCTTTAT TTATATGTG GTTTGTCTCA GCTGTGTGT GGGTTGGTGG AAGGAGACCA CACATACATA  
CACACAGAGT ACATACATGC TGTGTATGTT ACACACATAC TCACACCCCA CAAAGTGAAG CTCCATGCTC ATTTTGTTTA  
ACAAAGACTA GAGAGGCCTT GCAGACAACA GCTACCTGGA GCAGGAACAA GTGAAGCATG TTTCTGAACC ATTTCTCAAG  
TCACA

SEQ ID NO:881: (Length of Sequence = 336 Nucleotides)

GTCTTTNCAG TCAAAGTCC TTGAAGCTGG GACCCTTTGA AAGTCTGTCA GTTACATGTT GTTGGTAGTG GCTTGTMTG  
ACCGTTTCAA AAAAGGAAGA AAAAACCCT TAAATCATTT TTCTTTCTC TTTTCTACTG CAAAGGCCGA CGAGATTGAA  
ATGATCATGA CGGACCTTGA AAGGGCAAAC CAGAGGGCAG AGGTGGCTCA GAGAGAGGCG GAGACCTTAA GGAACAGCT  
CTCATCGGCC AATCACTCCC TCCAGCTGGC CTCACAGATC CAGAAAGGCA CCAGACGTGG AGCAGGCCAT AGAGGTGCTG  
ACCCGCTCCA GCCTAG

SEQ ID NO:882: (Length of Sequence = 369 Nucleotides)

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TGCCATTAGC AACACTGTTC AGATGAGATA ATTAAGAAAA AAAGCCAATT GAATGATTGA GTGAATGANT GATTGAAAAT  
 CTTTCCGAAG TTATAATAAT AATTGTGATT ATTGGGGTCA AAGCAAAACC ATTTTAGTCT AAAAGATTGT AACTATATACC  
 AACTTTTACC CAATTTGGAA TGAAAAATA CATTTCCTAA CCATGTAGAA ATTCTGANCT CTTTGAAATA TTTCTTTTG  
 TGGGAAAGAA CCAGAAATTC TTTGTCATAT GTACCCATTT ATCTTATTIN AGTTACCCAA CCAAAGATA AAATAATATT  
 CTCAAAGAGA TAATTGACTG GAGGAGTTTA AAGTGTATTAT AAATATTAG

SEQ ID NO:883: (Length of Sequence = 369 Nucleotides)

CTGCCATAAG AATATCAGCC TGGGGGAGT CCAGACGAG CCTTTGTCA TCCTTTCTGT TTGCCTAGTC TCAGCAGACT  
 GTGATCACA GGCATTGTCT GTGGGATTTT NCTTTCCCT TTCTTGATCT CTCTTGTTGT TCTAGGTTGT TTGGTTGTTC  
 ATTGTTATGG TGGCTTTTNA TTTTAACGCC CCTTGAGCCC CATGATGGCT GGTGTCACCC TGTTCTTTTA CACTGTTGGG  
 CCAGGTGCTG CTGTCTCTTC TTAGGGCATC ATCAATGCA AATATTTCTT TTGCTCCCT TTATGAAGAT GTTCTTATAC  
 CCTTGCTTTT CCATATTTT TNIGGGCCAA GCAATGCCAT CTNCTTTTA

SEQ ID NO:884: (Length of Sequence = 327 Nucleotides)

AGTTCATCTT TTTCCAGAG GGTCTGGGTG CCTTTAAAG GGTGCAGGCC GAAGAAGATG GTGGCTTGGG GAAACTGGAG  
 CTGAACCTTG ATTCAAGACT CTGAGGCACC GGGATGGGA TGGGAATAGG GACTGGCACA GGCAAGGGGA CGATTACAGG  
 ATACGGCACC AAGAGGGTGG CTGGTGGGAC CAGGGGGGAC AAGGGGGAGC TAAAAGGCTG TGGGGGCACA GGGGCATAGC  
 CAGGAGGAGG CTGACAGGGT GGGGGCCCGA GAGTGCCCTG GGAGGGAAAC AAATTCCTGA GCACAGCTTC AAATGGCAAA  
 GTGGGCT

SEQ ID NO:885: (Length of Sequence = 380 Nucleotides)

CCAAAAGCTT ATCCCATG ATCAAGTGGG CTTTCATCCT GGGATGCAAG GCTGGTTCAA TATATGCAA TCAATAAATG  
 TAATCCAGCA TATAAACAGA ACCAAGACA AAAACCAT GATTATCTCA CTAGATGCAG AAAAGGCTT TGACAAAATT  
 CAACAACCTT TCATGCTAAA AACTCTCAAT AAATTAGGTA TTGATGGGAT GTATCTCAA ATAATAAGAN CTATCTATGA  
 CAAACCCACA GCCAATATCA TACTGAATGG GCAAAAACG GAAGCATTCC CTTTGAAAAC TGGCACAAGG ACAGGGATGC  
 CCTCTCTCAC CACTCTATT CAACATAGGT GTTTGGGAAG TTCTGGGCCA GGGGCAATTT

SEQ ID NO:886: (Length of Sequence = 400 Nucleotides)

GGGATGACTT TAAACGAGAG CTGGACAGTA TTACTCCAGA AGTCCTTCCT GGGTGGAAG GAATGAGTGT TTCANACTTA  
 GCTGACAAGC TCTCTACTGA TGATCTGAAC TCCCTCATTG CTCATGCACA TCGTGTATT GATCAGCTGA ACAGAGAGCT  
 GGCAGAACAG AAGGCCACCG AAAAGCAGCA CATCAGTTA GCCTTGGAGA AACAAAAGCT GGAAGAAAAG CGGGCATTTG  
 ACTCTGCAGT AGCAAAAGCA TTAGAACATC ACAGAAGTGA AATACAGGCT GAACAGGACA GAAAGATAGA AGAAGTCAGA  
 GATGCCATGG GAAAATGGAA ATGAGGAACC CAGCTTCGCC GACAGNAGGC TTGCCACAC TGATTCACTT TCGGAGATGT

SEQ ID NO:887: (Length of Sequence = 363 Nucleotides)

TAAAAAAT GCTCTGGATG GGAGAAATGT GGAAGTTACT TTGGAAGTGG ATAATAAGTA AAGGCTGAAA GAGTACTGAT  
 ATACATGCTA AATAAACCA ATATTTCCCT GAATGANCTA TTCAAAGCAA TTCTGGTGGG TGTTAGACAG GACATAGAGA  
 CCTGGAGAAG AAGTCCCAT TTTCTAAAG AACACAAACA ATCATGTATA GAATGTTGGT AGAAATATGA ATGGTGAAGG  
 TCAATGTAAT GAAGCTTAG ATGGGAATAA GANAGGTTAT TAGACAAGGG AGAAAAGGTA ATCTTGTTA TAAAGTGGCA  
 AAGGAAGTTG GCCTGAATTG TATTCATGTN CTAGTGCTTT CCT

SEQ ID NO:888: (Length of Sequence = 318 Nucleotides)

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ATCTTGCATG ATTAATACTA TTGGCCTGTN CCCTTTATCC TCAGCTGGTT GTACAATTCT TGAATGCTTT CTCTTCCCC  
 TGAGGATGCT ATAGATATTG TCCTACTGTN ATCTGAAATN AGTCGTTTGG GAGAAGTTTC TCATCCAGA TACCTATAGA  
 GTCGTCTTT TTTTTTTTTT TTTTTTTTTT ATATGCAAAC NCTCGCTGTA TTATTCAGGC TGATCTGAAT CTCCTGGNCT  
 TTAGTGTGT GACAGCTTGG GCCTCTTAAA ACTGCAGNT TACAGGCATG AGCCACAGTG CCTGGCCATC AAGTAGCA

SEQ ID NO:889: (Length of Sequence = 349 Nucleotides)

ACAGAAATCT ACGTAGACTT CTNCCAAATG CCACATGAGA GCAGTGGCAG AATACAGAGA GACCGGCGAC CACAGCAAGG  
 AACTGTAAACG GCCAACAGTC CTCAGGCATG CAGGCCTGGG CCAACAGCAC AACGCAGAGT CGCTTCTTCT CAGTCCAGCA  
 ATTAAATGA CCATGGCAGC CAGGGTTTCA TTAGGTTACT TTCAAAAACC ACCTTTGCTG GAAAAATGT TTGGTAGTTT  
 AATCTGCATA TACGGACAGT CATGCACCAC ATAATGATGT TTAGGTCAAC GATGGACCAC ATATTCAATG GGTAGTCCCC  
 TAAGGTTTAT AACCAGCATA TTTTTTACT

SEQ ID NO:890: (Length of Sequence = 341 Nucleotides)

GINGTAGGGG TTGCTAGGTA GGGCTAGTAG GTAGGGTTAG TAGGTAGGGC TAGTAGGTAG GGCTAGTAGG TAGGGTTGCT  
 AGGTAGGGTT CGTAGGTAGG GTTAGTAGGT AGGGTTCGTA GGTAGGGTTA GTAGGTAGG TTCGTAGGTA GGGCTAGTAG  
 GTAGGGCTAG TAGGTAGGGC TAGTAGGTAG GGTAGTAGT TAGNGCTAGT AGGTAGGGCT AGTAGGTAGG GCTAGTAGGT  
 AGGGTTCGTA GGTAGNGTTC GTAGGTAGGG TTAGTAGGCG GTCTNTCCTT CTTCACCCCT GGNINCTTGT AAAACNITAT  
 TTTACAAGCA ATAGGAATTT G

SEQ ID NO:891: (Length of Sequence = 344 Nucleotides)

GACCTGGCTG CGCACCAGGA CCGNTGGAG CAGATGCGG CCATTGCCCA GGAGCTCAAC GAGCTGGATT ACTACGACTC  
 CCACATGTC AACACCCGGT GCCAGAAGAT CTGTGACCAG TGGGACGCC TCGGCTCTCT GACACATAGT CGCAGGGAAG  
 CCCTGGAGAA AACAGAGAAG CAGCTGGAGG CCATGACCA GCTGCACCTG GAATACGCCA AGCGCGGGC CCCCTTCAAC  
 AACTGGATGG AGAGCGCCAT NGAGCACCTC CAGGACATGT TCATGTCCA TACCATGAG GAGATTGAGG GCCTGATTCT  
 CAGCCCATGA CCAGTTCAAG TCCA

SEQ ID NO:892: (Length of Sequence = 367 Nucleotides)

CTGGGCAACA TGGTGAACCC CATCTCTGCT AAAATACAAA AATTAGCTGG GTGTGGTAGT GCCTGCCTGT AATCCAGCT  
 ACTCGGGAGG CTGAGGCAGG AGAATTGCTT GAACCTAGGA GGTGAGGTGG AGGTGTCAGT GAGCCAAGAT AAAAAGAGTG  
 AGACTCCGTC AAAAAAAAAA AAAAAAATA TATATATATA TATATATATA TATATTNGN CTCCAATCCC ATCTAGGTTG  
 CTGCAAATGC CATTAATTTA TTCTTCTTA TGGCTGAGTA GTTTTCCACT GTGTATGTAT ACCACAGTTT ATCTTCTTGT  
 TGATTGATGG GCGTTTGGG TGGTTCCACA TTGTTGCCAG TTGCAA

SEQ ID NO:893: (Length of Sequence = 220 Nucleotides)

GCAAAATATT TATTCCAAGT TAGTTATTTT ATGCAGTAGT TTCCCTCTG AGACTTGTGA TAACCACATC TTTTAAATCT  
 GTAAATAATG TTATCAAAAT AATCTTAATC TTTGAAATCT CACAAAAT TATATTTTAC AATCCACCT GAATATCAAG  
 GCTGCAAGAN TAACACAACA TTCTTATAT CCAAATATTT TACAGCTGTA CCCAAAAGG

SEQ ID NO:894: (Length of Sequence = 313 Nucleotides)

GGGATTGGGA TTGTTTGGCT CTGAGGCTGT TAAGTCTGGA CTGATGCTGG AAATAATAT CAATGTTTAA CAGGGTTGAC  
 TGTCATTAAT GATGTGCTTA GCTGTGGGTA CAGATGCTTT GCACATTACT ACCCTCTATT CTCACAATCT TCCATGGGGG

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ATGTATTAGA ATCCCTTTT ATAAAGGATA AAGGTGAGG TCAGAGAGAC TAGGAAGCCT GTNCAGGGTG ACACAATACA  
AAGTGCATA AATTGGGTTT GTACTCAGCC ACTCTGCTTA TTAACATCAG CAGTATGGTT AATGGGGTGA CCG

SEQ ID NO:895: (Length of Sequence = 304 Nucleotides)

GGTCTAGATT CAGTTATGAA TGTAGGCATT AGTTAAAATT AACAAAGATGC AGAGTATTAA TTTCTTAAGA CAACAAGTG  
ATTTCTGTAA GTTTGAGCCC TATGIGGAAA GCATTGTGGA ATCTAACCT TTTGTACAC ACTCTGTGG GACGTATCAT  
ATAAATGTCA GCACTAAGTA ATGCTTGT TGTGGCTGAA TATTTTNCGT AGATGTTTTT GAAGTTGACA TGAATTACGT  
GCATTTAAAT ATATATTGCC ATCCCTTAGT TTGTAATTAA GGATTINGGA ATATGGGTTG TGGG

SEQ ID NO:896: (Length of Sequence = 337 Nucleotides)

GCAAAGTATT TCATCATATG CATGTACTGT ACCTTATTTA GCCAGCCCCA TTTTGTTTGG CTGTGGAGA ATTACAATAG  
CTGTTTTGAC TGTGTATCA CATGCCAGGC ACTGTACTGT GTATTATCTC ATGTAATTCT CATAGTTACT GCATGGTGA  
GGTATTTTNA TCCCCAGTTT ACAGGTAGAG AAAGTGAACC CAGAGATGTT AAATAATTG CCCAAGTTTT TTGGCTGATT  
ATACTGATGA AGATACTGAT ACTAGCATTG TGTGTGCTAGT TATTTGCCAG ACAGAATTCT TTATTTTTTA ATACATAATA  
TCCATTTACT CTGTAGG

SEQ ID NO:897: (Length of Sequence = 316 Nucleotides)

NATCACCTNA GGTGAGGAGT TCNAAACCAG CCTGGCCAAC ATGGCAAAC CCCGINTCTA CTAAAAATAC AAAANTNAGC  
CAGGTGTGET GGTATGTGCC TGTAAATCCA GCTACTCAGG AGGCTGAGGC AGGAGANTCA CTGAAACAGG GAGGTGGAGS  
TCGCACTGAG CCGAGGTTGC AGTGAGCCGA GATTGCACCA CTGCACTCCA GCGTGGSCGA CTNAGCGAGA CCTGCGCTCA  
AATAAAGAAA TAAATAANTA AAGTGGGGAA GTTAGTGGTT TCTGGTGTAT TCAGAGTTGT GTACCCATCA CCTGG

SEQ ID NO:898: (Length of Sequence = 200 Nucleotides)

GAGATCTGGG GCTGGGGTAT GGATGATGGG GGAAGGGCG GTGCGCTCTG CCACTGTCAG GGACCAGCCG GCCAAGGCCC  
ACCCGNAAAG GTGTCTAAAA ANTNAGCTT TTCACCCACC TGCCCTTTTC TTTCAATCCC ACGCTGTTTC CTTTCAAAGT  
TCTGGGAGGA CGAACTCACC GAGGCGAGAA GTNTAACATT

SEQ ID NO:899: (Length of Sequence = 264 Nucleotides)

CTCTGTAAAGT TAGCGGTCAT GTTTTCAGCC CCATGCAAAG GCGCAANACN TCAGACAGCG TGGTTCTNIN AACATNAGTG  
TGTGGTGCTT CCCAGGAGCA GGGATTNAG CNAGGCTGCT GACACATAAA CACACCCCA CCTCCAGAAG CAGAGGAGAG  
GAGCCCAGGG CCAGGGCAGG TAGCTCAGCA AGGACCCAGC ATGCTNCAGG TGGGGCCAGT AAGAGTCACT TCTCCAGCNA  
GGTTCAGAGA GGAGAGAGGC AAGA

SEQ ID NO:900: (Length of Sequence = 265 Nucleotides)

GCAAATGGTA AAAAACCAG TCAGCAGAAG AAATTAGAGG AGAGACCACT TAATAAATGT AGTGATCAAA TAAAGCTAAA  
AAATACCACT GACAAAAAGA ATAATGAAAA TCGAGAGTCT GAAAAGAAAG GACAGAGAAC AAGTACATTT CAAATAAATG  
GAAAAGATAA TAAACCNAA ATATATTTGA NAGGTGAATG CTTGAAAGAA ATTTCTGAGA GTAGAGTAGT AAGTGGAAT  
GTGAACCAA AGGTTAATAA TATAA

SEQ ID NO:901: (Length of Sequence = 381 Nucleotides)

CTTCTGTGCA TATAAAGAG AACAGTCTGG NCACTTGAAA ACAGACACCT TCTGGTTTTC AATGTGTGG TCAAAGTGGC  
GATACAGCAA GGTTCGAGG GTGAACACAG TGTCGCACAT GGAACACTTA TATATNATTT TNGGTTCTCC TATCTTGATG

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CCAGGATGCT GTGTGTAGGC GTGGGAATNT GTGCTTGGGG CAGACTTAAA CGCCATTGGA CAAATAGGAC ACTTGTAGAA  
 GACTTCACAG TGAGAACCTT GAATNTAAGA CTTACAGACA GCCACATCAG AGTACACAAC CATTGCAAT GCACCACATC  
 GAAACCAAC TCTCCTCGTG TAGTNCAGAC AGTTCTTTGT GGCCTGGGGT CTNGGAAGGT G

SEQ ID NO:902: (Length of Sequence = 331 Nucleotides)

GGTGGCAGT GATCTCCTTT CTTATCACCT ATAGACAGCT TGCCACAGG AAAAAAGAAA GCCAAACACA GACAAGCAGT  
 ATGAGATACA ATGAGCGCCC TTGGGCCATT AAAATATGAT TGTNIGCCCA AGGTGCGCTG GNTGCAAAC AGCTCTCCAG  
 AACCTGCAGC CAGCACAGAC CAAAGTCAGG TTTGINTCCT CTCTGTGTGA TGAACAAAGG TTGATTCCAT ATCGTGGCTA  
 TTGTGAATAG TGGCAGTAAA CATGGCAGTA TTGTATGAAA ATATNACAGA TTAGNCCCTT TAAATATGTG CACTATGENT  
 GATCTATCAA A

SEQ ID NO:903: (Length of Sequence = 389 Nucleotides)

AGCAATACTA AACATAAATG TAAATTGGGC TAAATGCTCC CAATTAAAAG ACACAGAGTG GCAAGCTAGA TAAGGAACCA  
 AGAGCCATTG GTATGCTGTC TTCAAGAGAC TCATCTCACA TGCAATGACA CACATAGACT CAAAATAATG AGATGGAGGA  
 ACATTTACCA AGCAAATAGA NAACAACAAA AAATATTTCT AATAGATTTT TGCTTTTAAT AATGAAATAT GTCAAACCTC  
 TATAAAACT ATATGTAGGA AATATAAANG TTTATATATA ATTCAATGTA TGGNTAATAG TAAGTGAATA GCTAGTATTG  
 AATAACCAAG CTTCCTTTTG TTGTTTIGNA CATTTGGNGA ATTGAACATG CTTAAAGGTA TTGGGAAGG

SEQ ID NO:904: (Length of Sequence = 285 Nucleotides)

AAATCAAGGA CCGGTAGAT AGATGATGGG CTAGGCAGGT GGGGGAAGAC AGAGCTCACT GCCCTNIGGG GTCTCTGTGG  
 GGCCAGCCCC TATGCCCCT GTGGCCACTN ATGCCAGCT TCCCCAACA CCCCANCACA GGCCAGGTC AATATTACAA  
 AAGTGAACAA ATGCAACCTG TTTCTGCTTT NACAAATGAC ATGTCTCCAT CCCCAGCCAG CAGGGGTAGG GGAGGNCGGT  
 TGAAAGTGNC ACTCCGGTTA AAAAGGCAAC AACTTTTATA AAATG

SEQ ID NO:905: (Length of Sequence = 374 Nucleotides)

GAAGCAAAAA GTTGAACCTT TTAAAGTGCT GAACACAAAT CCAAATTCGA ATGGTTCAG CAGCCGTGAA ATCGCTCTTC  
 ATAAAGTGGG CTTAATCTCT TAGTTAAGT TCTTTTGATG GAATGAATTA ATTAATGTGT CAGGTGGCTT ATTGTGGAT  
 GCCATGATG ATGATGTTCA TTTTAAGCTC TTACCTATAG TACAAGTACA TGATGCTACT GAATATTTTT TCCACTTGGA  
 AACTGTGAGC TGGGTGTGTG CATTAAACA CACATACANA CANAATCANN AAACACTGCG GACTTTTCAC TCAAGCTGGG  
 TCTTTCTTC CCCAGTGGTA AGGCAAAATC CTGGCCTANC TAACCAACAC CCAC

SEQ ID NO:906: (Length of Sequence = 375 Nucleotides)

CTGACTGAAA GGCTCTTCC AGCTCCAACA CATGAAGGT CCAATATTT CCCCAAATGT CTGCGCTCT GAAACTTCA  
 ACTATCTTAA TATTGTGAC ATTTATGCCT GTGTATGGCA ATCTGATGGT AAAAGGAGCC ATATGTAAAT AATAACTGAA  
 ACTTTGTCAA AATAATGTTA AGGAAACATA ATTAGCAAG CAATATATAA TINCAAGTCC ACTGATTTAG AGAATCAGAA  
 GTAACANTTA GAATCAGAAA TAACAACAT CTGGCAGGGA TGGAAAAATG AGAGCAGATA TAAAGGTGT ACCCAACCC  
 CTGACCCAC TGCCATTG GTGTGCACT ATGINTTCC AATATTAATA TCTTT

SEQ ID NO:907: (Length of Sequence = 390 Nucleotides)

GTGCTGACTT CAGCAGCCCT CTGAAAGGCC CCTTCCATAA GCTGGGAAAG TATGATCATG GTTCATCAT CCTGTGTGGT  
 TATTACTTCA AGGTGACCA ATCTGAAAG TCTGTGTGAA GAAGGGGACT GAGTGGCTGT GAATGATGAG ACCGTGTGTT  
 AAAAGCCAGG CTAGCCTGA GGTCCGAAG AAGCAACCTC AATGCTGTGC TTTACCATAG CACCACCTGC AGTATCCAG

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GAATAGAGAA CCCAGCTGAG CGACTCATGC TTNACCAAAA ATACCCAGAG CAGTGTGTCT CTACCTTTTT AAGCCCATGC  
TCACTAGTGG GGAAACAAT TTTACCCCC TGTATTTAAA TATGGGGATT TCAAGGC AAAAGCATT

SEQ ID NO:908: (Length of Sequence = 207 Nucleotides)

CTTGCAATACA GGTGGTAAGT TATTACATTA TTCTNCCTC CTGTCTACCT GCAGTTGGTT TTATGAGGGG CGTTAGTACA  
CTTCCCAAAG GGCTTGCCCG CAGGTINAGA GGTGCACATT GAACTCCCTC ACCAGGCAGA TGGGAAGTGT GGCCATGAGA  
GAGAGCTTCA GGGGNCCTNG GNTTATNACA TCGCTGGGCC AGGANAT

SEQ ID NO:909: (Length of Sequence = 339 Nucleotides)

GCAAGAGAAC CTGATATAAT ATCTATAAAT TTTGATTCCC TGGGGTATAA CAAGTAAATA ATTTTAAAT GGTGCTTAGC  
AAGATTGGTT CATGNAAT GAAGCAATTA TGGCTTGANT TTATATGTAC AATATTTATT GTCTTAATTT TAATTTAAAA  
CGAATGACAT GTCTCTTTTT TAAAAAAG TCTCTTTTA AAGATCTTGT AGTTGATGTG ATGAGCTATG CACTGCTAAA  
TATTTATCCA CACATAAATA TTTGANAAGG AATATGGNAT AGTCATGGGA TGTAGTTTCA TCTCAGTGCT CCATGGAGGG  
AGTGTTTTCA CCTCCTCT

SEQ ID NO:910: (Length of Sequence = 372 Nucleotides)

CTCAACTGCC ACTCACCTAT CTACCATCCA CTACCCANTN ACCACCCACC ATGACCCACC ATTTGCCATC TACCCATCCA  
TCCATTCTAT AAATAATTAG TAAGCACTTA ATGCATGCTA GGTATTATTT TAGGCACCAG TAAGACAATC ATGGGNAAAA  
AAGACAGACA ACCCCCGACC CTCCATCCT CAGGGAGCTC TATTCAGTG AGAACAATCA ATGTGCTAGA TTGTGAAGGT  
CATCAGTGCT TGCTGCCCGT GTAAGACTGA GGTTCOCAGG CCGGAGGACC AGNCTGGGC AGGGCTTCCC AGGGGTCTNC  
T...GGGGGA CTCTCAGGAG TCCAGCTGCT GCCCCTTAGC TNAGCACTG GG

SEQ ID NO:911: (Length of Sequence = 377 Nucleotides)

GAACTTCAAA AAAAAA AAAAGAGAGTC ATAATAAATA TTINACTGTC TAGTCAACCT AATTTATGAA GCTGATTAT  
CTAGCTNAGC CTCCGGAGAT TGCTACCGGA AATCTCCCCA GATGTTCCCC CTCTTAACCT AACTNTCCAC TGNTGGCAG  
GAAGGCAGCC GGGCATCTGC ATTCOGGAAG CCCAGCTGCT TGGGAAGAGA GAGGGAGCGG CCTGCACGTA ACTCAACAGC  
CCTGCCTGCT AACCAGTTAA CCAGTTCTCA GTTGGGTTCA CGGACCCATG AGGACCCAG CTCTCTTCCC CTCAGGTGA  
TATTGTGCTC CAAGCTNGGG GATGCCCCCG GGGACTATGT GGAGGGAGAG TTCCTTA

SEQ ID NO:912: (Length of Sequence = 370 Nucleotides)

ACAATCTACT TGCTACAGAA TCAGGATGTA TTNCCTATT TATAATAAAC TACAGAAGGT AGATTTCAAA GGTAAATGGCT  
GTTATGGAAA CCTACTGAG GTGTCTGCT AAAACCAACT CAGTGTGCAA AGCGAAATAC ATTTNCTACT TCAATAGCTC  
CTCATACTGC ATCTGTCTGT AGAGTTTATT TCAGTAAAC TGTACTAT TTCATGATGA GTAGCTAGAA TTAAAGCATT  
AAGTAGCTTG AGAAAATAAT CTATATAAAT CTATATATCC TACATATGGC TATAAAAATA AATTTATAAT TTTAAAAATT  
GTTTAAATA AACATTTATT TTTTACCCTA CCAAAGTAAA GGTATACAG

SEQ ID NO:913: (Length of Sequence = 313 Nucleotides)

GTATCTGGTT GCCACATCCA AGAAGAACGC GTGCNNTG CTGGTCTTIN CTTCCTCTA TAAGGTGGTG CAGGTNTTT  
CCGAGTACTT CAAGGAGCTG GAGGAGGAGA GCATCCGGA CAACTTNTT ATCATCTACG AGCTGCTGGA CGAGCTCATG  
GACTTCGGCT ACCCCAGAC CACCGACAGC AAGATCTGCT AGGAGTACAT CACTCAGGAA GGCCACAAGC TGGAAACAGG  
GGCCCCGGG CCACCAGCCA CCGINACCA CGCGGTGTCC TGGNGTNG AAGGCATCAA GTATCGGAAG AAT

SEQ ID NO:914: (Length of Sequence = 389 Nucleotides)

TTACAGGCGC CTGCCACCAT GCCCGGCTAA TTTINAGTAG AGATGAGGTT TCACCATGTT GGCCAGGCTG GTCTCAAACCT  
 CCTGACCTCT GGTGATCTGC CCACCTCAGC CTCCCAAAGT GTTGGGATTA CAGGCGTGAG CGACCGTGCC TGGCCTTCTC  
 CACTGTTTTT ATAGTGAAGA AAGGACACCC AAATTTTGAT CTGGTTCAGC TATTCACTAT TCIATCCTGT GTGGTCTTAA  
 GCAAGTTACA TAACTTGCCCT ATATCTCAGT TTACTTAGCT ATAATAATAA TTAAATGGT CAAATGTTCT CTAAAGTCTT  
 ACTAGTTACC AGTGTTCAT GGGCCCAACA GCATCTACAT TACCTGAGGA GGCTGGTAGG AAATGCAGG

SEQ ID NO:915: (Length of Sequence = 328 Nucleotides)

CNCCAGCAGA TTTTNATTAG ATGGAAGATA ACAAGCAITA CCNCATAGGT AAGTGGTAAG AAATGGCAAG TACAGCCAAG  
 CCACAGAGGA GTGAGGACAT TACTGGCTAT GGAATGGGT ACTTATGAAA TCTAAGGGT GGTCTCTCTG ATGAACCTTA  
 ACTACCCAGT AAGCTCTTCT CTTTGGCACT CAATATGACC NCTGCTGGCA TGAAAGGGNC TACAGTAGCT ACTTTCAACT  
 TGGCCAACAG TTCCTCCAGT TCTGGTCGAG CTTTGAATCG TCCCTTTGAA GTCTTCTTTC AGNIGGTGCT CCTTCAACTT  
 GACAAGTC

SEQ ID NO:916: (Length of Sequence = 365 Nucleotides)

CAACTTCAAG GTGCTGCAAG AGCTTTCAAG AAGATGGGTG TTGACAAAAT CATCTCTGTA GAGAAATTAG TGAAAGGAA  
 ATTCCAAGAT AATTTTINAGT TTATTCAAGT GTTTAAGAAA TTTTGTGACG CAACTATGA TGGAAAGGAT TACAACCTC  
 TNCIGGCGCG GCAGGGCCAG GACGTAGCGC CACCTCCTAA CCCAGTTCCA CAGAGGACGT CCCCCACAGG CCCAAAAAC  
 ATGCAGACCT CTGGCCGGCT GAGCAATGTG GGGCCCCCT GCATTCTCG GAAGANTCCT CCATCAGCCC GAAATGGCGG  
 CCAATGAGACT TGATGCCCAA ATTCTTTGAA CTCAAACCA CAGCT

SEQ ID NO:917: (Length of Sequence = 400 Nucleotides)

GCATTATTTA TTGAAACTA TGTATTTTTT TGTA AAAACC TGATCACATA GAGAATATCA GTGGCTATAC CCTCTCTGGG  
 CATCAGTTTC CTCATCTGTA AAGTGGGGAT AATCAGAGC CCCACCACAG TGGGCTTCAG GGAGGAATAA ATGCATTAA  
 ACATGGCAAG TCAATTAGGA CGGTGCCTGA CAGGCTGTCA GCGCCCAAGG TTGTGACTTT TGCTTTTCTT ATTGCTACTC  
 TGCAACCAAC TTTAGATAGT GGTAGANTAA TCAGGAGGCC CTCCTGAATG GGATATTTTG CACAGAAGAG GTCCAGACC  
 GAGTGTGTGT GACATGGGAG CAGAAGACCC GGGGTTINAG CCAGGCTCTG CCACTCAIAC GGTGTACAAT TTTCAAAGG

SEQ ID NO:918: (Length of Sequence = 348 Nucleotides)

CTATTGCACA TGGTAACTCT GTCATACATC TATAAAGCCT AGTAGCTGTA TTGGGTGAGA TGAAAAAAC TGCTTATATT  
 CCACAGCAAC ATAATTACAA ATAAGTTTAA ACCTATTAAA GTACAGAGTC TCTCTCATCA CTTTCAAAGC AGGACCCTAC  
 TTACCAATAA TTCAATAGCAT ACCTCCCCCT ATTTTAAAAC TCATATGATA GCTGATTTCC TAACTGTAGC AATCAGGATT  
 CTTAGAAAGA TTCGAACTG AATTTAGCTA ACTAAGGAAG CGGATTTTCAT TAAAAATATT GGGTTAGTTT ACAGGAATCA  
 GTAGTGGAGG AACCAGGGTT GCATAAAA

SEQ ID NO:919: (Length of Sequence = 345 Nucleotides)

GGGATGACTT TAAACGAGAG CTGGACAGTA TTAATCCAGA AGTCTTCTCT GGGTGGAAAG GAATGAGTGT TTCANACTTA  
 GCTGACAAGC TCTCTACTGA TGATCTGAAC TCCCTCATTG CTCATGCACA TCGTCGTATT GATCAGCTGA ACAGAGAGCT  
 GGCAGAACAG AAGGCCACCG AAAAGCAGCA CATCAGTTA GCCTTGGAGA AACAAAAGCT GGAAGAAAAG CGGGCATTTG  
 ACTCTGCACT AGCAAAAGCA TTAGAACATC ACAGAAGTGA AATNCAGGCT TGAACAGGAC AGAAAAGATA GAAGGAAGTC  
 AGAGGATNCC ATGGGAAAT GAAAT

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SEQ ID NO:920: (Length of Sequence = 299 Nucleotides)

CCCAGGTACT CAGGGAAGGG GCAGGAGAAC CACTTGAGCC AAGGAGTTCA AGGCTGCAGT GAGCTGTGAT CACACCACTG  
 CATTCCAGCC AGGACAACAG AGTGACATCC TGTCTCAAAA ATAAATAANT TTTTAAATGA TGAAACTAAC TAAGGTACTG  
 AGGAGGTAAG ATATTTCCCC ACGGTAAGTC ATTCAAGAAC TAAATGTGAA AAACCAAAG AAGCCTCTGG GGTAGTATT  
 CCCAGTCTCC TTGTCTGCCC AGGACCCAC ATTTGTGTAA GTTGCTAATT GCACAAGGG

SEQ ID NO:921: (Length of Sequence = 234 Nucleotides)

ATGAAGCAGA GGCAACCAAC AGAAATTGAC ATCAGAAACT CTGCTGGNTC CCCACCAGCA TGCTACCGAT GANTCCTGCT  
 CTCCTTCAGA TGAAATTTTA TTTTITINCC AATAAGGCCA GCCCTACCTT GGAATCTGGA ACCANTTCTG GCCCAGGGTA  
 GAAAGGCTAC CAAGCACCTA TGGTAGAAGC CCTGGGTGCC AGGNATGCC TGGNCCTTAT TATTGACCTT CTCT

SEQ ID NO:922: (Length of Sequence = 328 Nucleotides)

TAGCAGGGTT ACTGGCCTTG GCTGCGGCCA AGGGAAGACT CTGCAGGCC TATTACTTGG CGGCCTTTAA CTCTTATAGA  
 ATTGGGAGAG AACACTGACA AAAGCGAGGA CATGATTIN CGTTACAAA TNATTTTCCT TGCTTGCTTT CTCTCACCC  
 TTTTNAATTT TCCITTTTCIN CTTTCTCTGT CTATCTTACC TTCCCTCCGT GATCCCTGCC AGCCCTCTCT TCTTATTAT  
 AGCTGATCAT GGCAGTATTG TTTTITNCTG GGTAAATATC AGAGTGGAT TTAGAGAAAG CTTAGCAGGC CTAGCATGAG  
 GGCCTTAG

SEQ ID NO:923: (Length of Sequence = 371 Nucleotides)

CAGGAAACCT ACTGTGAAAA TGCAGAAAA CAACAGCAA AATTGATTGT TGACTCAATA TGATATATAG TTCAAATGTA  
 AACAAATGCT TGTNAGCATT CCACATCACT GAAGGAAAA AAGTAAGTTA TTATTTCCAA TGTGGGAGT TAGGTGCTA  
 TAAGCTEATG ANCACACACT TTCAGTGAAT TTATGTAGAA TCGGAAGCAC TTCATTCTCC CCTCACCACA CATCACCCC  
 TTGCTCTCC TCGACACGTG CAAAATGATA GGGCATGGTA GGGGTGTAG TGAAATNGAG AAGGCATGCC CCATCTCAAG  
 AAACAGGGTG GACCAGCCAC AGCTTTTCTG TCCANTTCT GATACAGGAA T

SEQ ID NO:924: (Length of Sequence = 371 Nucleotides)

ATGATCTGCT TTTTITGAT ACCITTACTT TTNAG AGGNGCGGG TTTCTGGAGC CGACTGAGGG ACTGGAGAAG  
 GCTACGGGG TCTCGCCCT GCCAGGCAA TCTT CTCTTATCA TTTGGTTATG CAAATCGCG TAAAGTTTT  
 CGAAGGGGG TGCTGGCTCC TCTTGGCAGC TCTCTTACT GACTTTGGGC ACCAGGGCTG CTCATACCTG CAGCCTTTTC  
 GGCCCTCTNG GCGCGAGGC GTCCGGCTC CGAAGCACT GCCATGGCC GGAATAGCAG CCCNGAGCA AGG

SEQ ID NO:925: (Length of Sequence = 317 Nucleotides)

AATGCTTTAT GATCAACTTG CCATAGGACT GATGGATTAA CCAGTGTTCG GCITTTATTG AAGTCTATGC CCTGCACAGC  
 TCTGTATGT ATTNAGATG CTAGAAGTTT TTINAGCATG TNATGTGTA TTCTGTGTG AATCTIAGN ACCTGTCCA  
 ACTTGGTTCT TTTTCAAGGT TGTITGGGT ATTCTGGGTC CCTTCTTTT CCATATGNAT TTNAGGATCA GCTTGTCAAT  
 ATCTGCAAAA AAAAAATCAG CTATATTTG ATAGAGNTT GTATTGCATC TTTAGGANIG GTTGTGTGAG TATTGCC

SEQ ID NO:926: (Length of Sequence = 247 Nucleotides)

GTATTTCATA CCACAGCATT TAAAAAGCAA TCCGCAAGTN ATAAAAAAA AAAAAAAA ATGATGTGAC ATATCCATTG  
 CCTGANTTGC CTCITTTGTA AGCCAGINT GGGATTATAG CAGAGGAGTA GCAGAAATAA NTATATTCAG ACACAAACAT  
 ATAGATATAA TAATATCCAA CnCITTTATA TGATTTAGGG TCTCGTTAAA ATGGTTACCA TTTCCTCTC CTAAANTTA  
 TATAAAT



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SEQ ID NO:927: (Length of Sequence = 286 Nucleotides)

GGCTGTCATG AGAATCACTT GAACCGGGA GCGGAGGTT GCAGTGAGCT GAGATCATGG CACTGCACCC TAGCCTAGGT  
 GACACAGCAC AAAAAAANC AATGTTCCAC AAGTCAAAA TTGINTTCAG GGAGTAGAAA AGTAGTAGGC TAGGTATCAA  
 AGGGTATGAA TGACTAAGTT CCTTCTATAA TATATGACT ATAGGTTAGG AGATACACTT TCAGTTCCCTG TTTTNGTAG  
 ATCTCCAAT GATCTGTCAT TTAAGAGTAC ACACGATGAG TGGAAA

SEQ ID NO:928: (Length of Sequence = 349 Nucleotides)

CTGTTTTAAAC CAGTATTAT TGCACATGGT TTTGTTATCT ATTGCATGTG GTAAATTACC CCATACCTTG CTTCTTAAAG  
 CATAGACAT TTCTGTAGT TAAGAATCA GAAGCAGCTT AGCTGAGCAG TTCTTGCTCA AGGTCTGTCA TGAGGTTGCA  
 GTCAAGGAGC TGGCCAGGC TGCAATCATC TGAAGCCTG ATTGGGGCTG GAAGACTCCC TTCCAGATG GCTCCCTCAC  
 AGGCTTGGCA TGTCAAAGCT GGATTGTTGG CAGGGGACCT CCATTCTTCC CCACATGGGC ATCTCCATAG GCTGTTTGAC  
 ATGGCAGATN GCTTCTCCA GCAACTGGG

SEQ ID NO:929: (Length of Sequence = 395 Nucleotides)

AGAGGAGGCA GCAGCCACCC CCAAGAAGAC TGTACCTAAA AAGCAAGTTG TGGCCAAGGC CCCAGTGAAA GCAGCTACCA  
 CCCCTACCCG GAAGGTTCT AGCAGTGAGG ATTCTCCAG TGACGAGGAA GAGGAGCAA AAAAACCCAT GAAAAATAA  
 CCAGGTCCCT ACAGTTCAGT CCCCCGCCT TCTGCTCCC CACCAAGAA GTCTCTGGGA ACCCAGCCTC CCAAGAAGGC  
 TGTGGAGAAG CAGCTCCCTN TGGAAAGCAG TTAAGACAGC AGTGATGAGT CTGATTCAAG TTCTGAAGAA GAGGAAGGAA  
 ACCCCCAACT AAGGTCAGTA GTCTCTAAAG CAACCACTAA ACCACCTTCA GCAAAGAAAG CAGCAGAGAG CTCTT

SEQ ID NO:930: (Length of Sequence = 214 Nucleotides)

ATCCAACAAT GACAATCCT CITCGGACAA TATTGCACT CCATTCAAAC CTGTGTTTCTG GTCACTCCGC ACTTCATCAT  
 CTCCCAATTT GTCCAAACA TACTGTAGCT CAAGTACAGT TTTTAAAGT TTCTGTCAG CTCTTCTCT CATAAGCTGC  
 TCCCGACGTG CTGTCTTCTT NATTGTTTTC TGAATATCTT GACTTAGTGC CATG

SEQ ID NO:931: (Length of Sequence = 245 Nucleotides)

GAAAGINTTC ACAACATGA TGCTTATCTA ATAAATATC ACTGAGCAAT AAGGAGAAAT ATTTTAAATA GATTTGAAGT  
 TGTGAACAAA TAATTAGAG TCCAAAGAGG ANAAAGANAA TTAATCTGT TTTTATCCC TAGAACTCAG AAACCTTACT  
 GGATTGGTCA ACAAGACAA ACTTTTTTAT GTATAAACA GTAGANTTCA TGGAAGGGAT AATNCTTTTG GAACAGGCTT  
 CTCGG

SEQ ID NO:932: (Length of Sequence = 303 Nucleotides)

CATATTGGGG GCCCAATATA AAGCAAAGCT GGAAGAAGG ATGATCCATG TATTNTGGG GATGGGATAT GGACAGGGAA  
 ATAGTGTTC AACTCCATGC TGAGTGTGT TTTGAATTGT AATGTGAAGT TGCCACCATA CCAGGGCTAT GACTGINTAC  
 GATGTCAC CCTGTAGGC TAGTAGCTTT GCAGTGGGAA AAGATGACAG GGCCACTTGT CCAGGGCAAT CAGGTAATAA  
 AGTCCCTGAG CTCCAGTTG CTAGATCTAA GGAAGTATT TTCCCTTCAT GTCAAAGATG GGG

SEQ ID NO:933: (Length of Sequence = 186 Nucleotides)

CTCTTTTGGG CTGTTTCA TCTCCGCGA ATTGAAGCA GTGATCTCTC AGGTGCTAAC CGGNATAGTA TTAGAAGACT  
 CCAATATCTT GCAGCTGTG GGACTTACTG TATTATCTT TGTTTTGT CATTTGCTT TGGGTCTTG GTCATGAGGT  
 TTTGCCTAAG CCAATGCTT CAAGGG

SEQ ID NO:934: (Length of Sequence = 336 Nucleotides)

GGGAAAACGT ATCAGCACAT GAAATACCTT GTAACATTTT CATTTATATA ATTGCTACG TGTCTTTGC AACATAGTGA  
AAAATAATCA TGCTGATGT TTAGTAGGCA CATAATAAAT AGTAATGGAA TGAATGGTTG TATATTTAGA GAGCCATGCT  
GAAAGGTTAA ATAGCAAAAT ATGACTACTT GGAGAATAAT GTTAAATTGT CAAGGAGAGT AGTGTTATAT GAATACTCAG  
ATGGATGGAT ATATAGANAA TGAGAAAAGC GACAGAAGGA ACTTAAAGAG NTTTTAAAAA TAGCTTTGTC TAAAGATTAA  
AAATTAAAGG TTCTAA

SEQ ID NO:935: (Length of Sequence = 383 Nucleotides)

AGGTAAGAAA ACTGCTGAGT GGGCTCCTTG TACCAGCACC AACCAGCAGC CCTTGACAGC ATAGATGGGA TGAGTGTAAG  
GGCTATCCTT AGCATAAGGG AAAGACGGTT ATAAGCTGAG AAGATTGAAA GAAGAATGGA GCCACAAAGA GAATAGCATA  
AATAACAAGA AGGAAACATG AAGAACAAGC ACTTAAGNTA TTAACITTTCA GTCTTTCTCC ATTCTTGAT GTCTAATGAG  
GCAAAATAAC TGGGCAAGGA CCACCAAGAT GAAGAAGTTA AATAAAATGT CACAATGAAA TINAGGTGCA ATAATACAAC  
TGTTGACTGA CTTTCCAAAA CCACGGTGAT CGGTAGAGTA TCATCAATGT TACCGAGGAT TTT

SEQ ID NO:936: (Length of Sequence = 204 Nucleotides)

GAAGCTGTGC CACCCTTCIN AACCTTINATG AGCTGCCINA GCCGCCAGCC ACCTTCTGTN ACCCAGAGGA AGTGGAAGGG  
GAGCCCCCTG ATGCCCCCA NACCCCACT CTGCCCTCAG CCCTTGAGGA GCTGGAGCAA GAGCAGGAGC CGGAGCCCCA  
CTGCTAACC AATNGCGAGA CCACCCAGAA GGAGGGGACC CAGG

SEQ ID NO:937: (Length of Sequence = 386 Nucleotides)

CTAACTAAAT AAGGGTTGCC AGATAAGTA CAGAAGGCC AGTTAAACTT GAAATGCATA TGANCAAGAA ATATATTINA  
GTATGANIAT GTCTCATGCA ATATTTGGGA CATAATTATG CTAAAGAAAG TATTCACAGT TTNCCAACA TTCAAATTGG  
AATGAGTGTC CIGTATTTTN ATTGCTAAA ATGGGCAACC CTAAAGCTGT ATCTCTACAG TTACATACAC TTACCAACCC  
CACCCATTCA TACTGGTCCA AGTTACACC CAAAAGAGGG CAGAAACAGA ATCTGAACAA GCTCAAGTTT NGAGGGCAAA  
AATGTTTCAT TCTGCCTTCT GGATINCIGT ATGAAGACTT TTGTTGTGAA AGATATGAAT AGAACC

SEQ ID NO:938: (Length of Sequence = 349 Nucleotides)

GACACTTCA GAATTAAGAA GCCTTGCCCT CTTTGGTGT CTTCACAATT GINTTAAGTC TATTATAGTA TTCATTTTAG  
TTTGAAAGCA ATAAATACAA TATTAGTACA AGCACACTGT CAAGAAATCC CTAGAATATG GCTCCTCTGA AGGTTGACAT  
GGGTCTGCT CGCATGTATC TTTTCATCTC CAGCATCCAG ATCAGAGTCA ACAACAACAA CTCTACAAAT ATCAGGCTTC  
TTGGTGGA GAAATCTGGA CATTTTINCT ATGAAAAAAG AGTTAGGTGA CATGGCATTAT ATATTTTTC TAGACTTAAC  
CTACAGAAAA TGTTTCAAGC TTATAAAAA

SEQ ID NO:939: (Length of Sequence = 374 Nucleotides)

GAAATAAGC CTCACAAGAA ATAAGGTGCT TATGGTGTGA AGTTACAATG GAAATAATC AATGGCATTG GTATGCATGC  
TGCTGTGTG ATGTAGATCA GTTCATAGGA GATGGGGCAA CAAATAAATA TCACCATGGG GATGTGATCA TCAAAACCCA  
GGCTGTGGAA AACTGTCACT CAAGTTTCTT CAACATATTG CAAGAAAAAT ATGATGGCTT GAAATCTAT AGATGAAGCA  
ATTTAACAAA CCTACCAATC TCATTTAATC TTGATTACTT TTAATAAAG AATAAAGA TGACAGAGAA AGGGTTTAA  
AATTTGTAAG ACACGGCTGG ACGGTGGG TCACACCTGT AAATCCAGCA CTTT

SEQ ID NO:940: (Length of Sequence = 385 Nucleotides)

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GTAATCCCAG CTACTTGGGA GGCTGAGGCA TGAGAATTTT TTGAACCCGG GAGGCGGAGG TTGCAGTGAG CAGAGATCAC  
 GCCACTGCAC TCCAGCCTGG GCAACAGAGC GAGACCCTGT NTCAAAAACA ACAAAATAAA TTTCCTTTTA ACATCTGTNC  
 CAAAATGAG ATAAGCGTTA TCAGGGCAAG TCCATCCTCA TCACTCTTTC CCTCCCCACT GCOCTCTCCA CGATGCCAG  
 CTGATCAAAA GTCATTTTTA CTCATAAGAC CAAAGTATCA TGGGATACTG TGCAGTINGA GAGCAGGTG ANCATCAGAA  
 ATAATTGCTG ACAATAAGT AAAAGATGGG AGAAAAGCAA GGCCNATTGT ATATAATACA GCTTC

SEQ ID NO:941: (Length of Sequence = 406 Nucleotides)

GGTAACAGGT TTTTACCAAC AATTGCTTGT AGCTAATGTA GAACATACCT GAGAAAATGG CTTCTGTGAA AGACCAGTTA  
 GTACCAAAAT AATCTGGCCC AGAAAATAG CCACCATCTT TGAATACATT AATAGAAATA GAATAACCCC CAAAGGGAGA  
 TGAGAAGCAT TCTAAAGTGC ACTGATCATG AGTTTCTATG TGATGATTG TGTCACATTG GAGCTCCAGT GCTTTAAAGC  
 TGAAATGAAT CCTGGCCTTT CACCACCTC CCTGCCATA GTATGGTATA TCCTCTTATT CCTTCCCTCT TAGCTTACTG  
 AGAGTGTAAAT TTCCAACCAG TTAAGGCCAA AGAGGACTAT TTTCTAGGAA AGGAGAGAGA GATGAATTAG CAGTTAATGG  
 AGGAGT

SEQ ID NO:942: (Length of Sequence = 296 Nucleotides)

GATGGCTCAT GCTAGTTCAG CAAATATTGG GCCCTCCTG GAGAAGAGAG GCTGTATCTC CATGCCAGAG CAGAAGTCAG  
 CATCOGGTAT TGTAGCTGTC CCTTTCAGCG AATGGCTCCT TGAAGCAAA CCTGCCANTG GTTATCAAGC TCCTTACATA  
 CCCAGCACCG ACCCCCAGGA CTGGCTTACC CAAAAGCAGA CCTTGGNGAA CAGTCAGACT TCCTCCAGAG CCTGCAATTT  
 CTTCAATAAT GTCGGGGGAA ACCTAAAGGG CTTAGAAAAC TTGGCTCCTC AAGAGT

SEQ ID NO:943: (Length of Sequence = 223 Nucleotides)

GTGCCATTAC AACTTINCTG TAACCCTGAA ATTGTGTCAA AGTGAAAATT TTTTAAATGA GATTATAAGA GCATAATCAA  
 ATTGGAATTT CCTAGGATA CCAGAGAATC ATTINCTTCT CAGGTAAAGG ANTTTTCCTT TINGTAGTCC AGAGCTATAC  
 ATGATTAGA AANTGTTTCA NCCAGGAAGA TGACATCTCT GCTAACCTAA TCGATTATCA TGG

SEQ ID NO:944: (Length of Sequence = 327 Nucleotides)

CCAGGCACTC AGGCTGGCTG TCCCTTNNNT CCTCCTGCC ACCCATCCA CTCTGAGCAT CAATGCAGCC GGCCAGTTGC  
 AGGCAACCAG GCAGCACCTT GGCTGCCAG GCAGGCTAAG AGGCCCCAC CCACTCCCC CTCTTTGCC AGTGGAAGAG  
 CTGCGGTAG GCATAGCTTT CCCAGCCTC CCTGCTTCAN AGGCAGGAGC ATGGCACTCT GGGAGTTGTA GTGCTCATAA  
 CACTCAGGCG ATCCCTTGTG CAAATACTG GAGGAGAGGA CTATGGTATT GGGGAAGAGA AATTNAGGAA TAAGCAAGGA  
 GTTGGCT

SEQ ID NO:945: (Length of Sequence = 222 Nucleotides)

CTTAAACAAT AAATACACCT GAGTAGTTT TCCAAACCTT TCCTCTGAT TAAATGCCCT TAAACTTAA ATCTCTTGTT  
 ATCTTCAGTT GTGATCTAGT CCAAGTGGA AATTAGTTT AGCTTTAAAA CCATGAATTT AAAGCTCAAG CCTGTAGCTG  
 GCTGCCTAGG CANTTATGA TTAGTTTAC AGAATAGCAC CCACTGGCTA CACAGNCCC AG

SEQ ID NO:946: (Length of Sequence = 286 Nucleotides)

GCTCTCTCTA CCCCCTCATC TAGGTATGTA TATAGCTCAT TTATTTAGGG GTGATGTAA AAAATTGAAT GCCCTTAATG  
 GCAAGGGAAC CAACCAATCA ATGTGGATGC CACAACTTTT TCCCCTGTG ACTGTGTGTA TTGGTATGGA AGTATTTTTT  
 TTTTCTCCA GCTTTTATTT CAGTTTCAAG GGATACATAT GCAGTTTGT NACATGGGTA AATTGCATAT TGTAGGGGTT  
 TAGTATACAG GTTATTTTAT CACCAGGNA ATAAGCGTAG TACCTG

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SEQ ID NO:947: (Length of Sequence = 335 Nucleotides)

GGAGGTGCAT TTNCTCCCC TTGAAAGAT TTATGTAGAT TCCTAAAAGA AAATTCAGAA TATGGAGTAG CTCCTGANTG  
 GGGAGATGTT GTTAAGCAAT CTGGATTCT TCCAGAAAGC ATGTATGANC GTATTCTCAC TGGTCCCGTT GTGAGAGAGG  
 AAGTAAGCAG GCGGGGGAGA CGGCCTAAAA GTGGAATTGC AAAGENCACA GCAGCAGCAG CTCTGCAATC TGCCACCACT  
 GTTTCAGGCA ATCCTTTTGT TTAAGCCAAT GGACCTACTT CCAGGGNGTG GGNCTCACA AACTTNTTTC AGGGCCTTAC  
 AACAAAAACC TACAA

SEQ ID NO:948: (Length of Sequence = 216 Nucleotides)

GGATGTAAGC TCCAGACAG ACATCTCGGG AAGCTTCGGC ATCAACAGCA ACANTCAGTT GGCAGAGAAG GTCAGATTGC  
 NCCTTCNATA TGAAGAGGCT AAGAGAAGGT TCGCCAACCT GAAGATCCAG CTGGCCAAGC TTGACAGTNA GGCCTGGCCT  
 GGGGTGCTGG ACTCANAGAG GGACCGNTG ATCCTTATCA ACGAGAAGGA GGAGCT

SEQ ID NO:949: (Length of Sequence = 369 Nucleotides)

CCCTTCTCA AAAGATAAAA ATCTCTGGCA GAAGAAATAG TTACCTGCTG CCATCCATCA GTACTGCAAT TACCATGACT  
 CTAAGTGACC TTCTTGCCCA ATGTTTAATG CACAATGGAC CGTGCCAGG GAGACCTGGG CATTNCTGT TGCTTTGTTC  
 TACAATGATC CCTTCTGTTC TAGCAGCGTG ANTCACTGAT GGTCACTACT TCTGAGGACT GTACGCATT TCACCCCTATA  
 TCCACCTGTA CCAGAAAACA TGGACATAAT TTAAGTTTA TTTCTACTTA ATAGAGTGAT ATTCCAACCT GTGTGGGAAA  
 ATAACCATTN GTCACCTTTT AAAGGAATGG TATTTAACAT TTATTTATA

SEQ ID NO:950: (Length of Sequence = 288 Nucleotides)

AATGGTGAAA TAGAAGTCCA ATTACCTGGG GAAACTTCAT CTTAACCCCTC TGAATTINC AGTCTAACCT AAATATTGAT  
 ACTACACCTG CAGCAGCAAT TAGTTTAGCA TGTAGTGAAA AAGTAAGTCT AAAAAATATT TNCATAATCT TTGGTTCCTA  
 AAATTGTTTT AAAAGAGATG CAGTGACATA TGTCTGGAGT TTGCTTATGG CCAATAGGTT AATGCTTCTA GCTTCTATGC  
 TTATTGCAA TTTTAATTAT GTGAATATGC AATTTTCACT TATATTTG

SEQ ID NO:951: (Length of Sequence = 302 Nucleotides)

TGTCACGATG TTACAAGAAC GATTCGGGA GTTINCCGA NACACCGGA ACATTGGGCA GGAGCGCGTG GACACGGTCA  
 ATCACTGGC AGATGAGCTC ATCAACTCTG GACATTCAGA TGCCGCCACC ATCGCTGAAT GGAAGGATGG CCTCAATGAA  
 GCCTGGGCCG ACCTCCTGGN GCTCATTGAC ACAAGAACAC AGATTCTTGC CGCTTCTAT GAACTGCACA AGTTTTACCA  
 CGATGCCAAG GAGATCTTTG GCGGTATACA GGNCAACAC AAGAACTNC CTTGAGGAGC TT

SEQ ID NO:952: (Length of Sequence = 302 Nucleotides)

TTTTTTTNT CCACTTCACA GTTGATGCCA ACCCAGCCTG CATCACAGAG AACTTATAT CCACTGAGAC CTCCAGTACA  
 GTTTCATGG ATGCAGGGAT TGCNCAGGCA TTGTTTACC GTTINAGTAG AGCTGGGGTG ATGGGGTCCC TCGGGGCATA  
 TACAGCGGAA ACCATTACA CCGTTGATAC ATGTNGACC CTTGCGACAG GGATTGGNGG CACACTCATC AATGTCAATG  
 TTACATCTCT GGCTGTGAA ATCCTGGTGA GCAGACACAA CTGTAGCGAT TAATTGCCAT CC

SEQ ID NO:953: (Length of Sequence = 301 Nucleotides)

GAAAAINAAC TTGTTTGAA AAGTTAGTAT GGGTTAGAAA TGGGAAGAAA ATCTAAAATG TAAGAGTAAA AGCAAGGCCT  
 TCATGGCATT CTCTTTAAT ATGGGCTTIN CTGTGTTAGT TAACATCTGA TAATATGACC CCCCAATCTA TTAATATTTA  
 TTATACTCAT AAAATTACAG AAAAACCTA AGAAAGGGTA TGTATIGAAG TGAATGAAT AAATGCAAAA AATGTAGTAC

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TTATAACATT TTGAAGAAAA TCTTTAAAAA TTTTGTGTTA CACAGAAAAT AATCTTAGAA A

SEQ ID NO:954: (Length of Sequence = 217 Nucleotides)

AGAGCTTAAA AATAGTGAAG TCTTTATAAG TAATTTTAA AAATTTAAAC TAGGACCATA AATTTCTAAA CTATGAGATA  
AATGANCAAG AAAACAAACA GGTGTTTAGG AAAAGGTATG TATATGGTCA ATGAAATAAA TACAACGTGA TTTTAAATGA  
GANTTAACAT ATTTTNNTTT AACAAAAGCA GCATGTAACA CACAATGTAT TATATGT

SEQ ID NO:955: (Length of Sequence = 260 Nucleotides)

TATTTGATAG AATTTTCTAG TGAAACCATC CTGACTTGGG GTTTTATTTT GGAGGAATTT TAAGTTATTA ATTCCGTCTC  
CTTAATAGTG ATAGGACTAT TCAGATTACC TTATTTTATA TTGGGTGAGT TTTGGTAGCT TGTGTTTCTC AAGGAAGTGA  
TCCATTTTCA CTAAAGTGGC AAATTTATGT GTGTATAATA ATTTGTAGTA TTCCNGTATT ATCCNTTGA TGTCTGTAGG  
GTCTCTAGTG ATATCCTATG

SEQ ID NO:956: (Length of Sequence = 216 Nucleotides)

CCCTATTAAA TCATTAGCA TTGCATGCAA TACTTTTINCT GTGAAATTA TTAACCTOCT GGTATATAAA ATTATTTCTA  
GTTATGTTTA AATATTTCCN CTGGGATATT ATCATCTTAG ATCTGTAAAG TGGTACTAAA ATAGTTAAAA ATTATTTNTA  
AGATATACAC AAACAGAAAA ATATAAANC AAATGTATCT TATACATAGT ACTTGG

SEQ ID NO:957: (Length of Sequence = 353 Nucleotides)

TATGTACCAG GTGTGGAGCC TAGAACAGAC ACCAGTCAGA AGTGACAGATA AGGTCTGACT TTCCAGCATA GCCAGGGGAC  
TTGGCTGACT CCACATGTCC CCAGGCTTA CTTAGCTGTA AAGCAGGCAG GTTGTGAAGT CATAGTGGCA GTTTATGAAA  
TATTTAGGGG ACCTAATAAT CTTTAAATTG TATAACATTT CTGCATAAA TTTCTTTCA TGAATCCTTT CATGACTTAG  
ACCATCTATG ACATGCTTGG ACTTTCTGAC TTGTCTTAAC CACCCCTCTC TTTAAACAAC CAGTCTTTTT ACTTTAGGAC  
AAGAATTTAC CATACAAGAT TCTTTGTAT AAA

SEQ ID NO:958: (Length of Sequence = 410 Nucleotides)

AAGGAAATGA ATTTGATAGC AGATTGTTAG AGATTAAATTA CCTATCATAT GCCAAAGCCA CTTCTACAT GTCAGTGCTA  
AGGAATCCCC TAGAGATGGA ATTCTTAGGT TCAACTGAAA ATTAATGTGA ATTAATATAA TAGGTTAATT CATTGTAATT  
ATTTTAAAGC CTTTTGGCAA TGAGTTAATT CCACAAGATC CACATTGCTT GAAGTGTAC AGAGAACTACT TGATGAGAAT  
GINCTAGTAA TAAACCTTAA CCTCTGGGG AAAAAATCCT ACTGTCTTTC CTTCTGGCTT CGTTTCTTCT GGAACATATT  
TNGGTGGCAT TTGGATATCT GGAGGACAAA GGGATCCCTA CAAGGTGENT GCATAACAT GCGTGGGCCC AGATGGACTG  
TGCTCATGG

SEQ ID NO:959: (Length of Sequence = 197 Nucleotides)

GCCCGGCGAC CGTAGCATCT TCTGGACCAC AAAATAGAAC ATTGCCAGGC AAGGCAGGC ATTTGGGGAA TTTNAGAGAA  
AGCAGGATGA GTGATGGAAT TGGGAGGGTG GCACAAGATG TTAACAGCA TATCTTAGTC CTCATCTAGG GTATAAACA  
GGACCCATGG ACTCTAGCAT CCTGGAATGA CAGAGGG

SEQ ID NO:960: (Length of Sequence = 345 Nucleotides)

AATAAACTTC TGTGTTTTTA AGCCACCTAG TTGTGGTCAC TTGTTATGGC AGCCTTTGGA AACCAACACA CCCGCACATG  
GCGTGTTTAA CGCAGGCTGA TACAACCTTA AGAAAGGAAT GNTGTGGTC ATCAGCAATC TCCAATACCT ACAGCAAATG

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GGAAGACAGG GAAGGACCAG AGGTGTAGGT AAAGCAAAA GCCACAGGTC ATTAGGAAGT GATGCTCCAA CTGGGCATGG  
 AAAAGGAGTT TGGAGTTAGG AACACGACAG ATCTGTCTGG ACAAGGNTCC AGATCTCTCC TAGGGGAAG NAGGGCAAC  
 TIAGGACAGT TTTTGTGTCT GTGGG

SEQ ID NO:961: (Length of Sequence = 327 Nucleotides)

GCTGAAGAGG AACATGTCTC CTCGGCCACT TCAATCACTG AGTGTGACAA ACTTCTCTCC TTGCCACAT CAGTGGGTGA  
 GGACCAATCT NTGGCCTCAC TTACAGCTCC CCAGACAGAG GAGACAGGCA AGAGCTCCCT GCTGCTTGAC ACAGTCACAA  
 GCATCCCTTC CTCCTTACT GAAGCTACGC AGGGCTTGA CTATGTGCCA TCAGCTGGTA CCATCTCACC CACCTCTCA  
 CTGGAAGAAG ACAAGGGCTT CAAATCACCA CCTGTGAGG ACTTCTCTGT GACTTGGGAG TCAGAGAAGA GAGGAGAGAT  
 CATAGGG

SEQ ID NO:962: (Length of Sequence = 369 Nucleotides)

AATTAGATT TGCAAGTTTT CTACATTTTC AAAACA AAAAACA AAAAACA ACAACAAGAA ACGTAGACTA  
 GTTGGGCTCT GTCATGCCCA GGACATGAAT CAGCCCTCA TCCAGCTTCT CTGACCATTG GTCATTAGT GGTCTTCTTG  
 GTTTCAGAT AGCAAGAAGG GTGATTACAG CACGATATTT TGACAGAGAC CACATTCACA TAGCTTTTAT TAGTTATTGG  
 TTGCTGTAA TCTCTCACTG TNCCTTGTTA AGCTTTATCA TGGTATTCAC GTAGAGGGAA AAAGCCACGG TATAGATATG  
 TAGGGTTCCA TACTATCCAG TCTCAGGGCA TCCACTGAGG GGTCTTCTG

SEQ ID NO:963: (Length of Sequence = 278 Nucleotides)

CTCAACACC CGAGGCGGG AGGAAAGAGA AGCCGTGCT TCAGAGCAGA CACTCCTTAG ATGGCTCCAA ACTTACAGAG  
 AAAGTGAAA CTGCTCAGCC GCTGTGGATA ACGTTAGCAC TGCAAAAGCA AAAGGGGTTT CGGGAGCAGC AGGCGACGG  
 GGAGGAGAGA AAGCAAGCCA GAGAGGCCAA ACAGGCAGAA AAGCTCTCCA AAGAAAATTN GAGATCTCCG ACTCGGCTCC  
 CCCAGCGCG CTGGTAAAAG AAGTCACCAA GAGGTTTT

SEQ ID NO:964: (Length of Sequence = 349 Nucleotides)

ACACTCTCLG TATAGACAGT CGTGAAGAAC AAGGCTGAGG GATTTTNAAG TAAACCCATT TTCAGGATGA CTACAATCCT  
 TCCACTTCTA GAAACTTAG AAGTACAAGA AATAGCTCTA CTACGGGTAA CTGATTTAAC AATTTCCCAA ACACCTTTTC  
 CACTACCCAA GCCCGTGGCC CTCAGAGAGA ACCGGGATGG ATTGCCATCT GGGTTCAGAG GCAATATGAG GAGGTGGGG  
 GGATGGCAGG GGCATCTCA GGGTTGGGG GCAGGCAAG GGGATGAGAT GGCAAGGAC AGCTTTNGGA ATCAGATAGA  
 CGATCCAGCG TGCCCTCTTA CACTTGCAT

SEQ ID NO:965: (Length of Sequence = 361 Nucleotides)

AGCAGCAAGC CAGACGTGAC TGTCAGGAAC AAGCTAAAAT AGCTGTGGAA GCTCAGAATA AGTATGAGAG AGANTGATG  
 CTGCATGCTG CTGATGTGA AGCTCTACAA GCTGCGAAGG AGCAGGTTTC AAAAATGGCA TCAGTCCGTC AGCATTTGGA  
 AGAAACAACA CAGAAAGCAG AATCAGATT GTTGGAGTGT AAAGCATCTT GGGAGGAAAG AGAGAGAATG TTAAAGGATG  
 AAGTTTCCAA ATGTGTATGT CGCTGTGAAG ATCTGGAGAA ACAAAACAGA TTACTTCATG ATCAGATCGA AAAATTAAGT  
 GACAAGGTCG TTGCCTCTGT GAAGGAAGGT GTACAAGGTC C

SEQ ID NO:966: (Length of Sequence = 163 Nucleotides)

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CTGCCTTCTG GGTTCAGCG ATTCTNATGC TTCAGCCTCC CAAGTAGCTG GGATTACAGG CATGTGCCAC CATGCCAGT  
TAATTTTTGT ATTTINAGTG GAGATGGGGT TTCGCCCTGT TGACCAGATT GGTCTTGAAC TCCTGGCCTC AAGTGATCCA  
CCT

SEQ ID NO:967: (Length of Sequence = 365 Nucleotides)

GTGTCAGTAA TATGTTGTAC ATATTATINC ATCACCAGG TGTTAAGCCC AGTNCCTAAT AGTTACCTTT NCTGCTCCTC  
TCCCTCCTCT CACCCCTCTG CTTCAAGTCT ACCCCNGTGT TTTCTCTTTT GTGTTCTTAA GINCTTATCA TTTAGCTCCC  
ACTTGTAAGT GAGAACATGC AGTATTGGT TTTCTGTTCC TTTGTTAGTT TACTAAGGAT AATAGCCTCC AGCTCCATCC  
ATGTTCCAC AAAAGTCATG ATCTCATTCT TTTTATGGC TGCATAGTAT TCTGTGGTGT ATATGTACCA CATTTTCTTT  
ATCCAATCTG TCATTGATGG GGCATTIAGG GTTGATTCCC TGTC

SEQ ID NO:968: (Length of Sequence = 390 Nucleotides)

GTGTATAGTA ATTTAATAGT AATTAAATGT AGAGTATTTG TAAAAACAAG GAGAGGAAAA AGAACAATTC ATATTTGAGA  
ACTCCTAATA ATCTCTIAGA GCAGAGTTCA AAGAAGCAGT GGTAAAAATA AAGCCAAAGA GATATAGGGG CTAGTCTTAG  
AACCAGGACT TCCTATAGAA CCAGCTTCCT ATAGAATCTG AACTTTATCT GAAACTCTTT CACAGATCTC CTCCACCTTA  
ACTTCCACAA AATAAGAAAT TTGGATTTTG AAGGCAAATT TGTATATTTT AAGGAGCAGG ACAATCTCAG CTGTATCTGG  
GTTTGCAGAT ATCCAACAA TCCTACCCAA ATCACTTTTC CAGCTGCAGA CTTGGAATTT CAGATCCAGG

SEQ ID NO:969: (Length of Sequence = 340 Nucleotides)

CAGACAGAAA AAGATTTGAA GAGACGGGTC AGGAAGTACG GGAATTACTG GAGGAAGAAA AACTAAGTTG TGTGCCAGTN  
CTCATCTTTG CTAATAAGCA GGATTTGCTC ACAGCAGCCC CTGCCTCTGA AATTGCAGAA GGACTGAACC TGCTATCCAT  
CCGGACCGA GTCTGGCAGA TCCAGTCTTG CTCAGCTCTC ACAGGAGAGG GCGTTCAGGA TGGCATGAAC TGGGTCTGCA  
AAAATGTCAA TGCAAAGANG AAATAAAATC TAGACGAATG GAGATGCAGG AGCTTCGGGA GCGAATTCG GGCCTTAAAA  
ACACTAATTT GCTGCTTTCT

SEQ ID NO:970: (Length of Sequence = 372 Nucleotides)

TTTAAAGATG GGATCTCAGG GTTACCCAGG CTGGAGTGCA GTAGTGGTTC ATAGCTCACT GTGGCTCAA ACTCCTGAAC  
TCAAACIATC CTCTGCCTC AGCCTCCCA ATAGCTGGGA CTGCAGGCAC ATGCCACCAT GCCTGGCTAA TTTTAAATT  
ATTTGTAGA GATGGGGTCT CACTTTGTTG CACAGGCTGT TTGCTTGATT CTTAAGAACG TATAGGGATC CAGCTGTACA  
GAGCTTTCTG CAGTCTTTTG TAATAGAATT AGTTGTTAAA ATTGTACTTA TTACATGAGG CATCAAAGAC CTTGGAATAA  
AGCTATTNCC TCACATATCT GGGCCATTAT TTTGGACTTA CTATGGTTAC CG

SEQ ID NO:971: (Length of Sequence = 337 Nucleotides)

GACTATAGAG AACGCTGAAG TTTGAATAA AAGACTCTAG GGTGAGCTTC ATCAGTGCTT GCTTTGGNTC CAAGATGTAA  
TGAGATTCTN CTTTCACGTC AACAAATGCC GCAAATNCTT TCACCTGAGT GGAGCTCGGA GCACCCAGTC TCTCTGCATA  
TAACCAAAC AAATTTGAAT CCAAAAGGTA GATGTTGAGA GTCTTGTTGG TTCTGCAGCT CAGGCTGTG AAGTTGTGTC  
TAGTCATGTC CACTTCTGGA AAGAGGATAC CTGINCTCTT CAATGTGAGG GAACGGGAGC TTNGGGGCAT CAACCTCACA  
TTTCTTCTC AAGGGGA

SEQ ID NO:972: (Length of Sequence = 396 Nucleotides)

TTCCNTTACA TCAAATATCC TCAATGGAAG AGGGGATATT GCACACAAAT ATCATAAAAG CACTACATAT TACTTTCACT  
GGAAACTAAT TTNCTACATT AGATATGACT GGATAGGATA GAAGTGATGC AGGATTATAA GACATAATAC CATACACAGC

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TGCAGACTGA CACAAACACC ATTCAGAAC AAGAGAGAGGA GTGTGAAGTG CTTCTCAGCT GEGCTCAAGA CCCTTCTTT  
CCAGTGCTGG AAAGAGGGGC TGCATGCACT GTAGGAAAAG CGTGTCTCTG AACTGCCACA GGTGTCTCTC GAAAGGGCAG  
CCCGTCTTG ATGCCACTTC TCCATGGCTC CTGTTTTTGG GGGAGCTCCA AACAAAGTCA GAGAAGCTGC CTATTT

SEQ ID NO:973: (Length of Sequence = 401 Nucleotides)

TTCTCAAAC TCCAGTTCTC TTCTGGGCC AAGATCTGGT CCACCCTGC CGTGGCCTCC TTCCCCTGGC GGATG T  
CCGCTCTGA GCAGAGAAAC TTTTCTCCC AGCAACTCT TCATCTGATG GGAGGAGGA ACTGAATAGC TTTCC  
GGGAGATAAG AAAGAAGAGT GTGGTGTGA CAGGGAGCTT TGAGCTGTGG AGTTGGGCTG GGCATGGAAA ATNCGG JGA  
GAGTAGCAAG GAATGAGGGG CTTGAGAGAA CTCTNGGATC AGCCCTCCCA CACTCACTGC CCTTTAAGGT ATCTTTGGGG  
AAAA AGGG GCTTCTATGA TGAGTCTGGC AGCTNCCAC ACTGCATTCT CCTCTGCAT TTTTITACCA TGCACCAGGG  
C

SEQ ID NO:974: (Length of Sequence = 311 Nucleotides)

TTTACAAATG AACCACTGAG CACCTCAGTA CTTAGCTCAT ACCTCATACC TTAGTTCCTT AGTACTTAGC CTTGTGCCAT  
CTTGAATGAG ATGGAGTGAA GTGAAGCTCG AAGGAGTGAC AGAGACATAG TCCTTGCTCT CAAGGGGTCT TTAGCCTGGT  
CTGGGGGACA AGATTTCTC ATCTACCTCT TGAAAGGTGG CAGGACAACT CCACACTGGA GTGTTCTCAC CAGCAGATAG  
GTGCTGCGGG AGTGTGGCGC CACATCTTT ATAGCCACAG GCTTTCGTGG GACTTNCCT GGGGTCTTC CCTATTGGC  
TGGGTGACC ATAAGCGCA AGTGAATGTG GCAAACTTCA ATTCACAATT AA

SEQ ID NO:975: (Length of Sequence = 340 Nucleotides)

GACAACAGAA AAAGAAGTGG ACAGTACCC TAGATTCTAG CTCACACATA ATTCAGCCAG ATAATCATCA TTTAAATAAT  
ACCCCTTGAA ATTTTTCAGA CTTTTCACAG CTCIAAAAAC ACAACATCAG ACATAACATC ACACATTTGT TCCAAGGAC  
TAAAAATCAA AAGCAATTGC AAAGTATTGG GAATCACTTT TATGGCTTTC CTAAGGGACA GTCCCATCT TCCAAGGAG  
TGTTTTTAA GAGCACTAA CTCTGGTAGG TTATCAAACT ATTTTINAT TCTAAATAAA TAAAGACTA ACTGAAGGTC  
TCAGGTGCAC ACTTATTTTT

SEQ ID NO:976: (Length of Sequence = 343 Nucleotides)

CTGTCCCTA AATATTATTA AATTTTAAA AATTAGACAT TTGGTCTAAA TTAGACAGGT AAGATACTAC TGTCCTTACT  
AGATGCTTTA AAGTCATAAA CTGCTTCTAT GGCTTTINAT AATTGINCAA CTTGCTTGCT TTAGAGCCAT TGGATTCTAG  
GTAAGGCCTA GAGACATTTG GAGTTAGCCA TGTCCTCTAG CTATGCTAGA AAGAGTCCGA CATTATCTGT GGTCTGTCC  
TGTATCTAC ACTCTACACC TGATACATAA TTAAATTAC TTACACTAAA AATAAAAATG GATGCATTTT TTAGGTAGGA  
AGGGTATGGG AAATTATAGG TTT

SEQ ID NO:977: (Length of Sequence = 265 Nucleotides)

ATCTTTGTA TATCAGTGCC TAGACTAAGC CTGGCGTATA ATAGGCACTC AGAGATTGA AGAATAAATG ACTAAATGAC  
TGTATCAAACT ACTTGCCCAT TGTTTGCTGT TTCTGANTTG TACAAGGCCA TCATGATAAT TGATGATCTT AATAATGTGA  
GAATATGATT CTNTACCTT AGTAAGAGAG CCATCAGTTT ATTGSATGAT AGTTATATGS AAAAAGAAGA AATGCTACTG  
TGATAAATAT TTATAATTTT AAACA

SEQ ID NO:978: (Length of Sequence = 285 Nucleotides)

ATGGTGGGCT GCGCTGGCG AGGTGGCCAA GATGSCACCT GTTCTCTGCC TCANAAGAAA AGGCACTGAC GCACTGACCC  
TTTNAGGTTG TNGGGGTGT GGTCACTGCC CTCCTGCTG AGGTCAAGT GTGTTTTCAA GTCAACTTCA GCAGACCTCA



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TTTAACCATT TTTTNTTCCC TTAAAAA AAAACCCAAA AAACCAAATC CCAATAAATA TGTATTTTTT NTCCATCACA  
ATATTGCTTT AGAAAAATAA GAGCCGTCAA GCAGCAATTT TTCCT

SEQ ID NO:979: (Length of Sequence = 316 Nucleotides)

GTGCGTNCAC ACTCTCTCC TGCTCCCCAA ACTCTCATC ATTGAAGCCG AAGTGGTCAA TGAAGGCAGA GGTGATGCGC  
TGCACTCGGA AGTCCATGAA GGCCTGCTGC AGCACAGCCT CCTCAGGGAA GTTGAAGTCC TTGAGCCGGT CGTCTCATC  
GTCACCTGGAG GAGTGTAGGT GGTGGGTGTT CACCAGGTCC ACCATGTTCT TCTTGTGGT CTCGCCAGG GGCCCCGATA  
CGAAGGCTTC CCACTGCTCC TGCTGCTCGC TGGGCAGCTC CTTACAGCAGC TTGCCGCAGC TGCTCTGCAA TTGGGG

SEQ ID NO:980: (Length of Sequence = 386 Nucleotides)

AAACTGGCTT GCCTTCATCA TCTCTGCAGG GNTCAGTAAA GATTAGAAAT GGATTATTTA CCTTGTATA CAAATACACC  
TCTTCCCTAC ACCCAAGANT TGAGAGGAAG ATGAGCTGTT CCTGTGTAA CGCCTGANTC AATCCCATTA TCTGCATTTT  
TGTTGTGGT TAGCGCTCCA GCAGCCTAAG GCGGGAGCTG GAAATGACAG CCTTGGAGAC GAGGAAGGCT CCAGGGAGGA  
CGGAGAGGAA CACCTGCTGA AGAATAAGAC GGGCGGCACC AGCCGGGCTG ATTTTGGGGA ACGGAAGGTA ACAGAGGGTG  
ATGCTTCTAA TCGCTTTTAC AAGGTCTTGG AAAGACGGGA TNGCCTTAAC CAACTTGGGG TTTCTT

SEQ ID NO:981: (Length of Sequence = 322 Nucleotides)

GTTTATTAAAT ATTTAAACAT ATTAAATAA TACATGTCNA TAATGAAAAT GAAACATTAC AAATAAATAC ACAGGAAAGG  
CAGTATTCCC CTTCAGTTC CACTCTTGAA ATAACCAGTT AACAAGATGA TGAACATCTT TCCATGATGT TCTCCAAGAT  
TCATATTATT TTGTCAATCA TACAATGGCA TATACAGCTC AGGTGCGGTG GCTCACGCAA GTAAATCCCA GCATTTTGGG  
AGGCTGAGGC GGGTGGTICA CCTGAGATCA AGAGTTCGAG GCCAGCCTGA CCAACATGAA GAAACCTGT CTCTTACTAA  
AA

SEQ ID NO:982: (Length of Sequence = 305 Nucleotides)

CCCAAGGCTG TAGTTCAGCA TCAACAGGGC AGGGAGCTTG GCAGGGCAAG GGCAGAGCTG GAGATCATGC CCAGTNTTCC  
AGGTGCCCTC CTCCCAATC AGCCTGGGGG GCACAGGACA GGGATGGAGA AGGGGCTCTC TCCATGGCTT GGGTAACATG  
CCAAAGGCAG GTCATAGGGC AGACTCAGTG GGGGTGGGG CCTGGCTAAC AAGCAATGGA GAGAACGGGG GCCATCCAGA  
GAGGTGGCA GAAGAGAGCC CTGGGTCAA GAGAAAATT TGGGGAAGAC AAGACACGGG AGAAG

SEQ ID NO:983: (Length of Sequence = 399 Nucleotides)

AGCCCTTGT TTGTTTTAA AAGCTGTCTT GTTACTGCTT AAAGTCTCCA AACTGTTATT GAGAACACTG ACCAGAGCCC  
TGTCATAGA CCAGTGTITT TCCAAGTGCA GATTGCAACT CCTTTGCAGA GTAGGTGTG GAGCCATTIN AGCTGACTAC  
TCACCAGCTT TCTTCAAAT GTAAATGGAA TAGGATAGAA AAATAATGAA AAATTGTAAA GTGAATTGGA TGCAAAAAGG  
GTAAATATTG TNGTGCAGA CTTTTTTGGG TGAGTGTGCA TGTTTCACA TACTGGNTCA CATTATAACA TGTATTGCTC  
ATTATGGGTT GTGGTCAGAA AAAATTACAG AAACGCTGTC TCAGACTGTC CCAAGTTGT ATTGCTTAT AATGGGACT

SEQ ID NO:984: (Length of Sequence = 408 Nucleotides)

GTGGTATGAG GTATCAATGA AATACATTTA AGATGTACAT TGGTTTGT TT CAGAAAGGCG AGACAAGTCA AAGCGGGGAC  
TTCCAGGCTA TAGGTAAATT TATACATTTT CTGGTTAAGA TTGGTTGAGT TTGTCTAAGG ACCTGGGATC AACAGAGAGG  
AAATGTTTGG NTTAAGACAA GGATTGTGGA GACCAAAGTT TTAATACGCA GAGGAAGCTC TTAGCTAGCA GGCATAAGAC  
AGAAGAGGCT GTAAATGTT TTCTTATGAG ACTGAAAAGG GTGCCTGACT CTTAATTGAT TATCTCTGG NTCTGGAAG

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AAAAAAAAA GGGAAATGGCC AGGTGCGGTG GCTCAGGACG GGTCTGGTGG CTCACACCTG TAATCTTTCT TAAAACGTTA  
TGAAGTTC

SEQ ID NO:985: (Length of Sequence = 439 Nucleotides)

TGGTATACTT TTGINTTTTT TTCTACTTGT TAGTTGTATT AGTATCAAAT GGCATAATAA AGTTACTTTG TTGCCATTT  
CCCCTCATC TGAAATCAC AAAAGCATT TATTTCTAAG ATTTATATCC ACTGACCTTT TCCCCAAGT TATTTTCCTG  
TTACTTGTAT TTCACTTTG CCTTATTTT TTTAATATTT GTATTAGAAT TAGCTTGCTC TTGTTTCCTT CACGGCAAAT  
GTGTTACATT GCCCACTGGG TGGCTTCTGC GGATGCCCT ACCCACCCCT CGTCTGGAGC AGAGAAGTCC TGTTAGCCTA  
GCAGCATAGT GGTCTGTGC AGTGCGAGGA GTGTGCTTC TCTAGCATGG TCTGTGATGT CATCTGGACA TAATTAATTA  
GACTAATCCG AATAGAGGAC CAAGACAGCC CTGCTTGGC

SEQ ID NO:986: (Length of Sequence = 286 Nucleotides)

CGGCGACGAA CATGGAGA CAGCTTG GAGCGCAAGT CCTCTGCGG GAAGAAGTGT CGCGGCTCCA GGAGGAAGTT  
CACCTTCTCC GGCAGATC AGATGTTG GCGAAGGACC TGGAGGAGTC GCAGGGCGGC AAGTCTCTCN AGGTCTCTC  
GGCCACCGAG CTCAGGGT CTGGCCCA GAAGGAGCAG GAGCTAGCCA GAGCCAAAGA AGCCTTNCAG GCCATGAAAG  
CTGATCGGAA GCGCTTA CAGAGAAGA CAGACCTGGT GAGCCA

SEQ ID NO:987: (Length of Sequence = 381 Nucleotides)

TCCAAAGGTT TTCATCTC TGGATAA ACAAA TG GTACATCTAC ACATGGAAT TTGGGA GATGAAACAG  
AATGINTGAG GGCACAC CATGTAT GGTG TG GTCTGCCTCC C NTCCA CAGGCA G GTGTCT  
GGGTGAGGGG CTGGGAG GGCAGGAG CATC AC AAGGGTGGAA GC AAGA GACCCAG T CAGGGT  
GTNTCACATG GTACAACCA GAGACTTGGC GTGC AGAA CCAAGAAAC ACTCAGGACA CAGACAT CTGCAGGGAA  
CCTGGGGGGT GGTGAGGAAA GTCTGCACG GGTGTTGGG GGGAGACTTG GAGGCTCTC T

SEQ ID NO:988: (Length of Sequence = 381 Nucleotides)

GAATTAATAC CAATAGAAGG GCAATGCTTT TAGATTAAAA TGAAGGTGAC TTAACAGCT TAAAGTTTAG TTTAAAGTT  
GTAGGTGATT AAAATAATTT GAAGGOGATC TTTTAAAAAG AGATTAANCC GAAGTGANTT AAAAGACCTT GAAATCCATG  
ACGCAGGGAG AATTGCGTCA TTTAAGCCT AGTTAACGCA TTTTCTAAC GCAGACGAAA ATGGAAAGAT TAATTGGGAG  
TGTTAGGATG AAACAATTG GAGAAGATAG AAGTTTGAAG TGGAAACTG GAAGACAGAA GTACGGGANG GCCTCCTCA  
TGTTTACAAT TTAATTAAT TTTTTTATT TTAGGTGAA TTTCTTACCA AACATTACCC A

SEQ ID NO:989: (Length of Sequence = 432 Nucleotides)

GTCTTGG TGGCAACCT CTGCTCTCTG GGTCAAGCG ATTCCCTGCT CTTC ACC CAAGTAGCTA AGAT 3  
CATGCGC ATGCTTGGC TAATATATAT ATATATTTTT NTAGTTTTTA GTAGAGCG GGTTCACCA CGTT 3  
GCTGCTCTCG AACTCCAGAC CTCAAATGAT CTGCCCCCT TGGCTTCCCA AAGTCTGGG ATTACAGGCA TTAGCCACTG  
TGCTTGGCCA ACAATATATA TTAATAAGC ACACATACAA CAAAGTAGG TGTGTTAAG CTTACAAAAA TGTGACCACT  
AGCTTGCTGA AACCTAACTT TTTATTTGTT CATGGAACCT TCTAGACCGT AACTACACTG AATAATGAGA ATCTGCTGTA  
ATCTTTTTTA GGTGCTGTAG ATGAGCAATT GG

SEQ ID NO:990: (Length of Sequence = 421 Nucleotides)

GGCAGCCCTA CTTTNTCTC TCATTAGCAG TTTCACTCCA CAGCTGGGGT ATTAAATTG TNAGTCATTG AAATTAATCC  
CTGACTGAAT TGGAAAGGAA TTGTATTTGC AGTATTTGGA TTTATTTATT TTNCAGGTAT GGAATCTGG TGATTTTGAA

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AACATGAATG ATACCATTTT GCAGCAGCAT TGTAGATTTC TAGTATTTTA GATTGGTATC ACAGTGCACC TGAAAAGTAA  
GTTTCATTTT ACTTTTTTNA TTGTTGTGTA GACGGAGCTC ACTTTTGTC ACGAGGCTGG AGTGCAGTGG TGTGATCTTG  
GCTCATGGCA GCGCTGCCT CGCTGGGTTT AAGCGATTCT CCTGCCTCAG CCTCCCGAGT AGCTAGGACT ATAGATGCTC  
GCCACCATGC CCAGCTAATT T

SEQ ID NO:991: (Length of Sequence = 351 Nucleotides)

CCTCACTCCC CGCGCTGGCA CCTCAGGTTT ACAAGAAGAA CTAGGAAATA ATGCCGGCCA CGCGACCCCT GGAGAGGGGG  
CCGCTAGAA CAGCGTTTCT AAGAATCCGC GCCACAGCAG GTCCCGGAT GTTGGGGCCT TAGTGTATC GAGCTAGCCC  
CAATCCTCAA CCGATCTTC AACTTCTGGT AGTCCTAACA GAAGTCTCGT ATTGAACCAG CCACINTGGC CAGGGAGAAG  
TAATCCTCTG ATAGTTGAGG TTCTTINCIT TCCTCTGGAG CAGATAGTGG TGCTCTCTCC CCACAAAGCT CATGTTCTGC  
TGGAAGAAAT GGAGATGGCG CCTTGAAGG C

SEQ ID NO:992: (Length of Sequence = 406 Nucleotides)

CCAGAAAAA TGGCCACTAC TACCCTTGG CTCAGAAATG CTAGTCTTTA TTINCTGAAA TGTTTTATAT AGAAAAATT  
TAATAATAA TAGACATTCT TATATATTC CTTACCATTT NAGATTGGGT TAAAAAGTAT GNGACTTCC GGCCGGGTGC  
GGTGATTCAA GCGTGCAATC CCAGCACTTT GGGAGGCCGA GGCAGACAGA TCATGAGTTC GGGATCTGTG GCTAACACAG  
TGAAACCCCG TCTCTATTAA AANTACAAA GGAATTCCTG CAGCCCGGGG GATCCACTAG TTCTAGAGCG GCGGCCACCG  
CGGTGGAGCT CCAGCTTTTG TTCCCTTAA GTGAGGGGT AATTCGAGC TTGGCGTAAA TCATGGTCAT AGCTGTTTCC  
CGTGTG

SEQ ID NO:993: (Length of Sequence = 381 Nucleotides)

ATGGAAGGAC CGTGCCGGGA CCCCAACGAG GCANTGCGGG AGTTTGCCAA GGAAATGAC ATCTCCTGTG TCAAATGA  
GCAGGTGATC GGAGCAGGGG AGTTTNGCGA GGTCTGCACT GGCCACCTGA AGCTGCCAGG CAAGAGAGAG ATCTTTTNGG  
CCATCAAGAC GCTCAAGTCG GGCTACACGG AGAAGCAGCG CCGGGACTTC CTGAGCGAAG CTCCATCATG GGCCAGTTCG  
ACCATCCAA CGTCATCCAC CTGGAGGGTG TCGTGACCAA GAGCACACCT GINATGATCA TCACCGAGTT CATTGAGAAT  
GGCTNCCTGG GACTCCCTTT CTCCCGCAA AACGATGGGC AGTTTCACAG TTCATCCAGC T

SEQ ID NO:994: (Length of Sequence = 384 Nucleotides)

GTCTTCCAG TTCGGAAGGA TAAATCAAA TTCCCACTTT CTGGGGTGGG TGCCCAAAAC CTTCACAACT CAAGTGTCT  
CCAAGTGCAA ATGTCAAAAT GGGAGGAGGA AAGGGTTTAA AAATTAGAGA AAATGTATG CACTTACGGA CTTAAAAATC  
CGAAAAACAT AGTAAAAAGA CAAAAAACA TAGCATTATG CTCTGAAATC ACAACCAAAG CAAAAATAA AGGGACATTT  
TTCACCTAAA CTACCTAGAG GGATTTTTG TTAGTTTTT CTTTTTCTT TTTTTTTCA TTTTCCAGTT AAGTCTATG  
TCTTTTNGTA AATTCCAATA CTTAACTGC AAGTCTGCAA TCGTCTCTGA AGTCAGTGAA ATTA

SEQ ID NO:995: (Length of Sequence = 386 Nucleotides)

ATAACTTTAA CAGAGGATTG GAATAATGAG GGATTGGCAA GGAAGCAGTA AAAGGGAACA CTAAAGTATA GAATAATAGC  
AAACAGAAGG AGCACCTAC CCTAGGGCT GAGAAAGAGC ACAGGGAAGT CCTTTTTTNT TCCTGGACAG AGATCCAGAC  
GAGCTGGAGA AAGAAGTTGC TATGTTACTG CATCANTGGA ACTTGCTGGA AATCCACCCT CAAGGGCACT AGGAAAACCT  
GTTACAGGGA GCTGTGGAGG GAAATGGGT TGGCAGGAAA GCTGCTGGGC GCGGGGTGCT TCAGACTGCA GTGTATTGCA  
GGAGCTTGGG CACTGGGGAA GCTGTGTGCA CTGCAGGATC CTGCTGAGCC AGCACATCAG ATCAGG

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SEQ ID NO:996: (Length of Sequence = 307 Nucleotides)

GTGCGCCAAC TGCAAGAAGG AGGCCATCTT TTACTGCTGT TGGAACACCA GCTACTGTNA CTACCCCTGC CAGCAAGCCC  
 ACTGGCCTGA GCACATGAAG TCCTGCACCC AGTCAGTAC TGCTCCTCAG CAGGAAGCGG ATGCTGAGGT GAACACAGAA  
 AACTAAATA AGTCTCCCA GGGGAGCTCC TCGAGCACAC AATCAGCACC TTCAGAAACG GCCAGCGCCT CCAAAGAGAA  
 GGAGACGTCA GCTGAGAAAA GCAAGGAGAG TGGCTCGACC CTTGACCTTT CTGGCTCCAG AGAGACG

SEQ ID NO:997: (Length of Sequence = 402 Nucleotides)

TCTGCACCTA ATACTGAGGG TGTGAAATCT TCCTCAGTAA TGCCAGCCC TAGTACCACA TTAGCGGGC AAGGCAGTCT  
 GGAGTCACCG TCGTCCGGTA CCGCAGCAT GGGCAGTGCT GGTGGGCTAA GCGGCANAGC AGCCCTCTCT TCAATAAACC  
 CTCAGACTTA ACTACAGATG TTATAAGCTT AAGTCACTCG TTGGCCTCCA GCCCAGCATC GGTTCAGTCT TTCACATCAG  
 GTGGTCTCGT GTGGGCTGCC AATATGAGCA GTTCTCTGCG AGGCAGCAAG GATACTCCGA GCTACCAGTC CATGACTAGC  
 CTCCACAGCA GCTTCTGAGT CCATTGACCT CCCCCTCAGC CATCATGGCT CTTTGTINTT GGACTGACCA CAGGCACTCA  
 CG

SEQ ID NO:998: (Length of Sequence = 304 Nucleotides)

GCAGTCTGT GATTGTINAAG ACTCACAACC ATGTGGAGAG GCGAATCAC GCAGGAGAGC CAGCATTTGG AGTACCTGG  
 CTCCACCCC CTTCGCCACC CGTINTTGAG CCAGAGAGCT ACAAGCAGGA ATCCAGTGC AGCTGCAAAT NATGGCCATC  
 GAGGAAGTCT GTGGAGAAGA GGCTGGGGGC TGTGGTCTG AGGGGGGCTA GGCTCAGCAC GGGACCACCT GACGACAGCT  
 CCCAGCCAGT CCATGCTGTC CAGGTGGCCA TCAAGCCAGG TTCCAGGGCC CATGGGTGCT TGCT

SEQ ID NO:999: (Length of Sequence = 321 Nucleotides)

AGAATGGTTT TGGAGCTCGA NATCTTCATG GGTAGACTT GCTGGTCAGA CCCAGGAGCA CCTGTGGCTC ACACCTTCTG  
 TNCCCTCTCT GGCTGTGCA GAATGTAAAC AGCAGACTCA TACTCAATGG GCACTACAGG CCTTATCAGA CGTTTTATAC  
 AAGCTGGAT TGCTTAGTAG GGAATAAGG CATTCTCTGA GGGGGCTTC CACTTAGATT GAGAAITTTA TTTGAAAAGA  
 ATCTGGTTTA AATGGCATTC TGCTCCGAGG TAGCTGCTCT CCCCAGTGA AGCTGAGCCG AAATATAAGA ATAATATATT  
 T

SEQ ID NO:1000: (Length of Sequence = 253 Nucleotides)

CCCTAGAGGA TTTGCCGTCT TINATCTGCC AGTGACCTGA ACCACGAGA TTTTCAAGC AGGAGGGCCG ATTGGGCAAC  
 CACAGCTCCC GTGCTCTCTC TTTGCAGTGC GCGGCTTTC CTCCGAGAAG GACTTTGAGG ACTACATTAG GTACGACAAC  
 TGCTCGTCCA GCGTCTGGC CGCCGTGGTC TTGAGCACC CCTTCAACCA CAGCAAGGAG CCCCTGCCN TGGCGGTGAG  
 ACGTCCGGCC GGG

SEQ ID NO:1001: (Length of Sequence = 164 Nucleotides)

AAACAGATTA CTGGATGTC ACTGTGGAA AGTGCTACA ATTTCTATC TAAGCCGAAG TTGTCTGTC TCCTTCTTAC  
 CTTAAGAT TCTCACTGCC TGAAGGCAGC TGCCAAAACC CCTCTAAGCA AGCAGCACTC TTACCCACCA AAATCTATGA  
 CTC

SEQ ID NO:1002: (Length of Sequence = 262 Nucleotides)

ATATCTTCTT GAGGAAAGT GGTAGATTA AAGAGGCAT AGAGAGCGCA CTCATGCATT TACAACCTAG AATTTTAAAA  
 AAAGTTTACA TTTTGTCAIT TGTACTTCAG ATGAATTINC TTATTAAAG AAATAAGGCC ACAGAGGTAA ACTTAAGTCT

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CCTGTTTCCC AATGCCTACC CTCCTTCTTC TCCTTTCTTC TTTCTCTTTC CTAGAGAAAT CCTGCCTTCC TTTCCCTTCC  
CAGAGGCAAC TGGCATTATA AT

SEQ ID NO:1003: (Length of Sequence = 267 Nucleotides)

GGAAAGAGGA GCAGGTCTGG AGGTTTGTGG AACCCAGTCC CCTGCAGAAT CTGTAAAACC TAATAAATCA TGGTTGTGGC  
CATTCTCAGC GTGGTGATTG TAATTAGACG ACCCCCGGGA AGCCAGACA CTCGGGGCCT GGAGTTCTTC CCCCTGCCTG  
ACCTAGAAGC AGAACCGTTT TCAGCGNICT GCGCTGTGG CTTAAGGCT TTGTCTTAAT TTAAGGAAAA AGATCCTCCC  
GGGTTTATT TCTCTCTTC TTGAGTG

SEQ ID NO:1004: (Length of Sequence = 277 Nucleotides)

GGCTCCTAAA CACTTCTTC CTGAGATGTT AAGCAAAGTA ATCATCCTGT CACTAGATAG AAGCGATGAA GATAAAGAAA  
AAGCAAGTNC TTTGATCAGT TTAATCAAAC AGGAAGGGAT AGCCACAAGT GACAACITCA TGCAGGCTTT CCTGAATGTN  
TTGGACCACT GTCCCAAACCT GGAGGTTGAC ATCCCTTTGG TGAAATCCTA TTTNGCACAG TTTGCAGCTC GTGCCATCAT  
TTCAGAGCTN GGTGAGCATT TCAGAACTAG CTCAACC

SEQ ID NO:1005: (Length of Sequence = 271 Nucleotides)

GTTAGGTCAT TCACACATGG TGGAGACAGG AATCTACAGA CTAGGGATCA GCCCCAAGGC TATGATCTTT GINCTGCGCC  
GCTCTACCCC TGAGCAGACG GGCCAGAGGT CCAGAGAGGG CTGTGCTGGC AGAGTTTATA CTTTGATAAC TGAACCCTAG  
AGTAAGCCTG CCCTGGGAAA TNCAGCTCA AGGGACTGAC AGGCATAATG CTCCTTGGGA GAGAAATGCC ACATCTGCAG  
CGACACGNAT CCTTAACACT GTCCAGGAC T

SEQ ID NO:1006: (Length of Sequence = 336 Nucleotides)

TATTTTNCAG ATATGGATAA AAATTGCTTA GGAGAGTAAA GAGAGACAAA GTTGAAAGCA GTTTATAGT AGGTGTGTT  
TTAGTGTTGA TCCCTTTTTG CTCCAATAAT CAAAGTGATA AATATGAAA ATTGATTCAT GCAGCATTAC TTAATCCATT  
CTAATTTTNA TATATGTCAA AAGTGCCATC TCCCAAACCTG TGCTATCCCC TTCAGGAGAA GAGACTCTGC TGAAGTTTAT  
AAGGTTGACA TATTGCCAGC TTCAATAATG TAAAGATGAA GTGTATACTG GAATTCCTAA TGCAAATAAC AACTCTTTTG  
GGAAGTAACC CCGTTT

SEQ ID NO:1007: (Length of Sequence = 355 Nucleotides)

GGCAAGAAGG CGTCGGCGGC GCANTGCGGA TCCAGAAGGA CATAAACGGC AGCTTGTTCC TCCAGGCTGG TGGGCTTNGT  
GCCCTCGGCC TTGGGATGCT TATCACAGTC CTTTGGGACC AGAACACTGG ATATCAGTNC AGCCTCTGGG CCAGCTTCAG  
AGGCTGTAG AGCATCATG CTGCTGTGGC TGATGCTTCC TTCTCTCAGT AAATCACAAA AGTCGTGTG GCCATCCAGG  
TTACCGAGTG ACTTAATTTT CAGAAAATTT AATATGAGG TCATTATTGT ATGCATTTTC ACTGTGCCA TTTTGTATC  
CTGTAGGTA GGTCTATGAA GTACCACTGG GTCA

SEQ ID NO:1008: (Length of Sequence = 269 Nucleotides)

ATATTTAAAG AGAGCTTTGG TCAGTAAAAG TATAAANCT GAGCTTTGGT AAGGGTACAG TTTATAAGGC CTAGAGAACA  
TCAAACATT CATTTTCATAT TGAATGTATA AATACCCACA TGTGAGAGCA CATGTTGATT CAGTTTGAAGT ATGCTGCCT  
TGTGNTCTT TAAAACCTTT CCAGCCTGGG TTATTTTCCC AAGCTTTCTT TATAATTACA CCAGGGAAAG AGTTACNGG  
NATTAATCAA AACCAGACAG TGGACAATG

SEQ ID NO:1009: (Length of Sequence = 295 Nucleotides)

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GATAGCAGCA ACATACGTTT GTTATTTCAT TTGCTTACTT ACAACAAACG TTTATTCAIT ATTTATAATG CAACAAGCAT  
TAACCTAGGT GCTAAGGAGA GAAAAATGAG TAAGACACAG TTTCTTTCCT CAAGGAAATC ACAGTCTGTT GGCAGAGATA  
AGTAGTAATG GTGCCTAATA TAGGTAACAC TTGCTACCTG CTCCAAGAAC AAAGTTAAGC AAGTGATTAA GTTAAGCAAT  
GCTTAGAGGT AGAGGATGTA AGANTGGCCT TAAAAAATGT GTCTTCTGAG ATGAG

SEQ ID NO:1010: (Length of Sequence = 356 Nucleotides)

GIATTTCCTC ATTTGTGCAA ATNAAATAGA AAAGGTAAAT NAGAAACTCA AGAGGTTTGT TACCTACTGT CAATGGAGTG  
GGGAAAATGG GTGGAAAGAA GAAGGCAATA AGAAAAGAGT AACAGGAAAC GACAGTNGAC ACTTCTGAGT ATACCTTGTG  
GAATCTCTTT CACTCTTAGA ATCATAGTAA TAGANGANGA AAAAAGAACT CCCCAACTG AAAAGGATAG ACCACTGGAA  
CAACTTCAAG TGGTCTAATG TAGAAGCAA TGGAGTCCCT CAAGGAAAGA AGAGAGGTTT TGAAAAGAAA AAAACATTTG  
AAGAGTTAAC AGCGAAACAC TTTCCAACT TAAAGG

SEQ ID NO:1011: (Length of Sequence = 315 Nucleotides)

AGAGAGACAC AACTGTAATA GAGACACAGA GGAGTGGCAC ACAGAGACCA CCTCCAGCT GGAGACAGTC AGGAAGGACT  
GAGGGAGAGG GGACAGCCAG GGCTCCACAC CCAGGCAAGA ATGGGGGAGG GCCTGTGGAA CAGAGAAGTC ATCAACACAC  
ACAGTTCAAA GTCTACCCTA GGCTAGGAGG GGGAGCAGGA AGAAGGGGCA GGGACGCAGG GGCCCGGCCCT GGNAGCTCCC  
TGTTGGCCTC TNCCTGCCCC TGCTGGCTCC CNCTGCGGTG CTCAGGCAGG AAGAGAGGAG GCTGCTGTTT TTAGG

SEQ ID NO:1012: (Length of Sequence = 272 Nucleotides)

CCCAACTCTA TAGCCCTAGT CAACCACTAA TCTATACCTT GTNCTCTATA GATTGCGCTA GTCTAGAAAT TTGTATATAA  
TGAAATGCAT GCACTTGAAC TTTTGTATC TGGCTTGCTT TTCCATTTAG CATAAAGTTT TAAAGGTCCN CATATGTTGC  
TGCATGTGTG CATTTCTTTT TGTGNACTGC NATATTACAT TGTATGGGAT ATACCAITTT GCCATATTTN GTTAAATCCA  
TTCATCCAGT TGGTGGGACA GCAGTTATT TC

SEQ ID NO:1013: (Length of Sequence = 252 Nucleotides)

TTTGTTAGTG TTTTCTACAC TACTCTCAAG TTCATTGAGC ATGTCATTTC AACAACTGT GACGTGTCAA CTTCAAAAAT  
TAAACAAACC AGCNAAACAC AACACTTGNC ACTACAAAGG AACTTGTITT ATTCTCAACC TTCTATGATA GCTAAACTTC  
TCTGNAATTT NGTTCCCCCA CACATCCAC ATCTGGGCTC AATTTCAGC TTCTGTINIT CTGTTTTATT TCATCCAAAA  
TGTTATTTTA AT

SEQ ID NO:1014: (Length of Sequence = 210 Nucleotides)

GGGATACACT GACAGTAATG TGAAGCGCCA CACTTGCAGA TTTCAGGCCC AGCAGGTCTT GGNCAAGTGC CATTCACCC  
GGAACTTTTA ACCCAAGCGG TGGGAAGGA AAGCCAAAAC TCCAAGCTGG CACTTTTTTG GGGTTCTGGG CCATGACACT  
TCTTAGGCCT TCTGCTGCTG AACTTTTACA GGGACAAAAG GTACCCACG

SEQ ID NO:1015: (Length of Sequence = 222 Nucleotides)

GGNAAGAAAG GTTCTCAGA GGACAGCCTT ATTAATTTCT CAGAGGATGA ATTTGNACAA TGGCAGCAGG TTGCAGTCAC  
AACTTCTTAA GGTGCTTCAG AGGCTGATTG TTCTAGNAA CACAGAGTAA TGAACATTC CTGAAGAGCA ATGAAACAGG  
TTTTGAATTT TTTGTATCT GNACTTAGNA ACACATCAGT CCCCATCAAC CCATGGACTT CT

SEQ ID NO:1016: (Length of Sequence = 236 Nucleotides)

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GAATAAACTG GTTTGGAAAC AGAAAAGTAC AAAAAAGAAC AGCTAGAGGT ACATAGACAC AGGACAATTA ATCAATTTGG  
GAAAAAAGAA AGNACTTACT TTCTCCATTG CTGCCTGAAT TGTITCCCAA TCTGCCTTGA AATGCCACTT TTGGCCAATA  
TTTTINCAA AATTTGACCA AAAAAGAAAA AGCACINAAT TTCCCTTTTT ATACAAAAAT GNTTAAGTAG GCAAGT

SEQ ID NO:1017: (Length of Sequence = 259 Nucleotides)

GCTTCCCTAG ATTTTCCCT AATTTGGAC CTATGTGGAC AAAAAAATA ATCTAGTCCA AGCTTTCCT ACCTTCTTTT  
TTTATCGCC TTCTGCTTCT GNGTCCACA TGGGAACCTG AAGTGGTTTA TAAGAATGCC ATGCTGTGCA AATAGTAAAA  
ATGAATTTNC TGATTTTAA AAAAGCCCTC AGGAACGGCA TATGTATANG GTATGTATAT GAAAAANGT GTTINAGGAAT  
GCAGGAGGGA AACTAGGCG

SEQ ID NO:1018: (Length of Sequence = 354 Nucleotides)

CTGGAGGAGG AGAAGAAGCA TCTGGAGTTT ATGAATCAGC TAAAAAATA TGATGACGAC ATTTCCCAT CCGAGGACAA  
AGACACTGAT TCTACCAAAG AGCCTCTGGA TGACCTTTTC CCCAATGATG AAGACGACCC AGGGCAAGGA ATCCAGCAGC  
AGCACAGCAG TGCAGCCGCG GCINCCAGC AGGGCGGCTA CGAGATCCCC GCGCGGCTGC GGACGCTCCA CAACCTGGTG  
ATCCAGTACG NCTCGCAGGG GCGCTACGAG GTAGCTGTGC CCCININCAA GCAGGCCCTG GAGGACCTGG AGAAGACTTC  
AGGACACGAC CCACCCGGAC GTGGCCACCA TGCT

SEQ ID NO:1019: (Length of Sequence = 393 Nucleotides)

GATGACCGAT TTGGCCATGG AAGACTTATC TTCATGGCAC AGAGAGNYTG TSCAGAGATG AGTCAGACTC AGGGGCTGAG  
TAACAGCAGA GCAGAGAGTG CAGAAGTGGG CGCTCAGAAG CGAGTTTATG TGITGTTTTY CCTCIATCTG CTGGCTGTGG  
CTGGTACTGC AACCTATCCC AAAGTAACAG CCTAGTCAAT GAGGTATATG CTTGAGATCT GGCAAACTCT CTCTGCACAT  
AAAACGTGA TTCTAGTTC TCTGAAAGAC CCCCATCTCT TTGAAGTGA AACTAAGAGC TACATTTTCC CTTTTACTAC  
ATCTCCCTTA AAAGGAAAGC ACTACAAGAG CTTTAAATA GCAAGCTTCC CTATTCTAAG GGGAAANAGT CTT

SEQ ID NO:1020: (Length of Sequence = 403 Nucleotides)

CTGAGGAAGA GAGGTGAAGT GGCATCTACC CAAACACCT GTGTACTGGT TAATAAGGTC GGTAGTTCCC ATTAATGAGC  
TTGATGAAGG ATGGCACCTG ACAGGGCCTT AAATGANCTG ATGGAGTGAA TGINACCACT GTGAATTAAA TTTNCTTTAT  
ATATAATAAA TAGCTGTGCT TACACATTTT CAGATTINCT TTGTGAGCTA TGGACATGGA ACAGCGGGAC TATGATTCTA  
GAACAGCACT CCATGTAGCT GCTGCAGAGG GTAATACAGG AACTACTCCT ATCTATTTCC TTTCCAGATT TAATTTCTAC  
TTAGTACTAA AATCTGCTCT TTTTTTGGGG GTGGGACGGT ATAGGTCATG TTGAAGTTGT TAAATTTTTT NCTGGAAGCC  
TGC

SEQ ID NO:1021: (Length of Sequence = 452 Nucleotides)

ATCGCAACCT GGCAGGGGTG TGGGGTTTGC TGGGGGCCTC TGTGGGGCCA TGATCTGAGG AGGGTATGTG GGGGGCGGGA  
GCTCAGCACA TTCCATGGCC TAGAGGGGOC ACACAGAGGC CCCAGTGGGA CCCATGGCGT GGAGGCAGGT ATGGGGAGTT  
KTGGGGAGAT CCCAGGGTGG TCTGGGGCCT GGAACCGGCC ATTKGGAGGC CCCAGCAGTT TCAKTGCCCC GGGCCTCCCT  
GCAGAGCCAT GCATGGCAGA AGAAGTGTGT AGCATGAGCT GGTACACGCC CATGCCCATC AAGAAAGGCA GTGTGGTCAT  
GCGTKTGGAC ATCAGCAGCA ATGGCCTGGG GACCTTCATT CCAGATAAAA GGTTCAGAT GATATCAACG GCTTCCTGAA  
GAGAGACCCG GGCAATAACA TCCATTCAANT TGGGAGAGGA GGTGAGGGAT NT

SEQ ID NO:1022: (Length of Sequence = 413 Nucleotides)

AGCAACAGAA GAAAGGGCCA CATATATGCA AATGCCTGGT CACTATATCT GGCCCTGAAG AAGGAAGGAG TTTCAGGGC  
 TCAGGAGACT GGAAATTTT NCCAGGAGCT AGGAACGAGG GGTGGGAGA CGTTGGTCAA AGGGTACAAA GTCCAGTTA  
 TGCAGGATGA ATAAGTTCTG AAGACCTAAC ATACAGCCCA GTGACCATAG TGAATAACAC TGAATGANCA GTATACTCGA  
 AATTTCCTAA CAGAAGAGAT CTTAAGTGT CTCATAACAC ACAAACATA GCAACTGTAT GAGGTGATGG GTATATTAAT  
 TAGCCTGACT GTGGTTATAC ATTTTATCAA AATGTCACAC TGTGGCTGAG TNCAGAGGCT CATACCTATA ATCCCCANCA  
 TTTTGGGGA GCT

SEQ ID NO:1023: (Length of Sequence = 379 Nucleotides)

TCAAGTCTCA AAACITTTAA AGACAGTAGA TATTGTGGT TTTCTAGCTA AATGAGGGCC AAGATTGGNC TTTTCAACT  
 AAATTGAATC ATGTAGTATA TCTGATTTCA TAGCTTTCTG GGGGAAAGG GAGGATTTGA ATTAGCAGCA GTGCAGGTCA  
 GGAGCAGTAA AGAAGACAGT AGGAGGAGTC CAACTACAGA TGTGAATGAN CAGCCTCAGA GGAACACATG AGAAGGTGAC  
 CTGCTGTTTA TCAGGAAGGC GGGGCTTTCT CTCTAAGATA CAAACCAAT AGGAATCGTC AAATAGTTCA AATTATCCGG  
 GGGAAAAGC CTGAGCAATG ATCCCTCTGG AAAACAAAGC AGTTCTCAGG CAGCACCTT

SEQ ID NO:1024: (Length of Sequence = 320 Nucleotides)

AGTCTACAGG AACAAAGAAA TCTAAGATGG CTGCTCAGCC TTGAAATGTA CATGTTTTGC AGCAAAGTTG TTGAAGAACC  
 TTCCGTGGC ACAGATTGTC CTTTTTACA AGCATACAGA AGCCTCCTTC CGCCAGGNC TCTCCGTTG CATCCTTGCA  
 AATGGCTCCC ATTTGACACA TTCTAAGTC TAAGAGATA CCACTAGGGC AGCTTGTACA GTTCTGAAT CCTGGGCCAT  
 TGCACGTCAA ACAACTGATA TCACATTTTT TTGCAGGATT TGTATCCATT CTCTGAAGAG TGGTCAAAGT AATAGCTGAT

SEQ ID NO:1025: (Length of Sequence = 368 Nucleotides)

TATTTAATCA TTCTTTCTT TGCCGAAGA CTTAAACTA AGAAGATTAT TCGAATGGTG AATTAACCTG TTGAAGAGAC  
 TATTCCAAAG GGATAGAATG AGACTAATTY CTGACTATGT TTTGCTAGTG ATGGGTGGAT GGGAACAAAC ATTACAAGAA  
 ATAGCATAAT GAATGTAGAA AATATTTTCA TTTGGAGATG TGCATGANTT AGTTTCTAG GTTTGCCACA ACAAGCATC  
 CCAAAGTGGT GGCITAAAAA ACAGAAATTT GTTTCATGGT TCTTGAGCCT AGAAGGTCAA AATCAAGGTG TTGGCAGGAC  
 CATGCTCTCT CTGAAACTCT AAGGGAGAAG CGTTCTTTGT TTCINCC

SEQ ID NO:1026: (Length of Sequence = 379 Nucleotides)

GGTGCAGGTG CATACAGGAA GGACATGTG GGCTCAGAGC AAGGGGGCGG CCATCTCCTA GCCAAGGAGG GAGGGCTCCA  
 GGGACCCCAA TCTGTCTGGC ACCTAGGCTT TGANTCTCCA GCCTCCAGAC TGGGAGAAAA TAACGTCTCA TTGTTAAAGC  
 CCCAGCAA TGANTACAGA ACCTAGGAAG GGGCAATGAA TGANTGATAG GTGGAAGGGC TAAGAAGAAA AGAGGAGGGA  
 GAGGAAAGAG ACGTCTCAG ATCTGTCTCT NCTGGACATC CGATCCCAGG CTGTCTCTTC AGTGGGNCCA AGTCCAACTA  
 GCAGTCACT CAGAAATAAT CCTNAGGCA TCGAAGCTTT CACAAAGGAG GNCACAAA

SEQ ID NO:1027: (Length of Sequence = 411 Nucleotides)

GCCCTTGGCA CTTAGAAGCA GCCAGGAGG AAGTACTGAC CATTTAAAG TGGCAGATCT CCGGGCCCA TTTCTGCAGC  
 CTTCAATCTG CAACTCCAGG GAGGGTATTT TTNATTTGTG GGTTCAAAA ATCTGTATAT ACAGTCTATG TGTTTAGAA  
 TTGTGTGTA AGTAACTAC AGCTTTGAGT TGGAAAGAAG TCACGGGTG TAAAACCAT TGGATTTTTT TAAAACAAA  
 GTATTAATAA TCTGGAAGAC AGINTTGGCC AGGTGAGGAG TGTTTTCTTG GTGGTTCCAG CCCCCATCA TTGAAGTGT  
 TCTGGGCTCA GTCAGACACA GACATTCATC TGTGTCTGAC CAAATCAGG GCTTTCCAC CTGTGGGGGA GGGCAGATT  
 AGGATGTTTT T



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SEQ ID NO:1028: (Length of Sequence = 401 Nucleotides)

GATCATCATG CAGCTCAACT TTCTGTTGGA TTCCATGCTA AGCAAGCTAA CCTTATCCTG CATTGTTAGC ACTAGGCACC  
 CAGCTGCCAC CTCTCCATCC TGCTGCCCTT AGGCCACATG GGAGCAGTCC ATGCATGACA GCCTCTATCC TACAAGGCCT  
 ATGAGTATGG ATTGGGGGGG CCAAAAGGAA AAAGCTCCAT GTGCCTCTTT GTCTGCGTGG GTCAGAAGAG TTGTGCAOGC  
 AGATTAGCAG GCCAAGGTCT GAGCCACAGC AGCATTTTTA TTTCAGATTT TGATAACTGT TTATATGTGT TGAAACCAAA  
 NTGNCATCTT TTTAAAGCTT ATCCATAAAA AAAAATAGAT GTCTTTTATA GTGGGAAAAC ACATGGGGGA AAAAATCATC  
 TATTTTGATG CAGCATTGTA TAATGNTTAA ACACCTCACA CCTCACTCTT

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GAAAAATGCC AATTGGATGC CCTTAGGTGG AGGTGAGAAA ATGGCATCCT TGCCCTCTTC TCAATATGAA ACATTAACTA  
 GTTGACAAAT TTATCCTTGT AGAAATGAAA ATCTATTTAA TCAGGGACCA GAAATGGCTG AGGAGATAAA TGATCATTA  
 CAAAATCTG CTTTGAATC CTGGACATTA CAAGGGGGTA AATGCAGCAT GACTTTTGT TAACCACATT CCAAAATGTG  
 GAACATTCT TTTAGAAATG AAAATATTTT AAGGCTGATG TATTTTAAGN CTACACATTA TCAGGGNCAT ACATTGAGAG  
 TTOGCTTAAT TAAAGGTTGT TGGGCATCAA ATTATGTTA GTAGGTTACT ATTCTCTAAC AACTCAAGN TGCTTAAATG  
 G

SEQ ID NO:1030: (Length of Sequence = 340 Nucleotides)

TTCCCGCTTG ATTCCAAGAA CCTCTTCGAT TTTAATTTIN ATTTTAAAG AGGGAGACGA TGGACTGAGC TGATCCGCAC  
 CATGGAGTCT CGGGTCTTAC TGAGAACATT CTGTTTGANC TTGGTCTCG GAGCAGTTTG GGGGCTTGGT GTGGACCCCTT  
 CCCACAGAT TGACGTCTTA ACAGAGTTAG AACTTGGGGA GTCCACGACC GGAGTGGGTC AGGTCCCGGG GCTGCATAAT  
 GGGACGAAAG CCTTINTCTT TCAAGATACT CCCAGAAGCA TAAAGCATC CACTGCTACA GCTGAACAGT TTTTTCAGAA  
 GCTTGAGAAA TAAACATGA

SEQ ID NO:1031: (Length of Sequence = 452 Nucleotides)

CCAGGGGAAG GNTCCCAAGG GACGGGCTGG CAGCCGGACA CATGGACAAA CTGATGGACC CAGGACTGAT CAGACAAAGC  
 TCTCATTAGC AGAATGIGGG CACCTGCACC CAGGGCCCAT ACCACGTCCC TGTGAGCAAA AAAGCTTAAA GTTCTCCCTC  
 CAGGCCCAGG GCCAAGAGCG CCTCACAAAG GGCTGCTGCC TTGAACTTGG CCTGGGGAAA TNAGACCCTG AGCGGACCAC  
 AGCCCTTGAG CCTGGGAGG AGCAGCCCAT CCAGNAGCAG CACAGCTNCC GAAACTTGAG GAAGAAGACT TCCACCCATA  
 GCACAAGAAC TGCAAAIATC GTCTNGGNCAG GAGCCACCAG AGGCCTTAGG CTCTCTAGGA CACCGATATC CCCCATTAT  
 GGGGTTNGGA GGGAGTGGCT TTTTLAGGCA AGGGACTTTG TTAGAGAGGT TT

SEQ ID NO:1032: (Length of Sequence = 411 Nucleotides)

GAATCTACAG AAACATAAAT TATACTGAGT TGTGCTGTAC TGGTTTGTGA GAACATCAGT GTATTAAGGA GAATGGTAGT  
 TTAATTGAA TATTTAAAGA AAGTAAITTG AATGGTTCTA GTACTAGGGC CATTTATTAAC TAGTAACATA GATTAGTGAC  
 TTCAACTGGG TGTCTTAT TCTGATTTG TCTGAAGTGA AAACGTGTA GGTGCTCTTT TAAAATGTAT TTGGAAACAC  
 CATAGTTAGG GTAAATNCA TGTCACAATT CACTCTTGCA TATTATTN CTTAGCCAAAT TTATGAATTC TAAGTTAGGC  
 CAAATTGAAG GTTTGGAGTT TTACATTGTG GNGAGTCTA AATTCATGCG TTTGGCAAGC ACCAAGNCA TGGGGAAAGA  
 ATCTGGTATT T

SEQ ID NO:1033: (Length of Sequence = 372 Nucleotides)

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AGTGGCTTAC AAAACACAAA TTTATTATCT TACCATTCTG TGAGTCAAAA TTCCAAAATA GGTGTCACTA GGCTAAAATG  
 AAGGACTGCA TTTNNCTG CAGGCTCCAG GAGAGATCTA TGCTTACTC TTNNCGGCTT CTAAAGGCTG CCCACATTCC  
 TCGACTAGTG GCGTCCCTCC TTCATCTCTA AACCCAGCAA CAACAGGTTG AGTCTCATG TCACATCTTT NTTACCTTTC  
 TGTACATCTA TCTCGCTGAC TGCTGCTGGG AAAAATTCTC CACTTTTAAG GGCTATCATG ATTAGACTAT GCCCACTAGA  
 TAATACAAGA TCTCAGATCC CTTAACTTCC ATCACATCTG CAAAAGTCGC TT

SEQ ID NO:1034: (Length of Sequence = 320 Nucleotides)

CGCGCCGCGA CGGACGCCCT CAACCGGCAA ATCCGCGAGG AGGTGGCGAG TGCAGTGAGC AGCTCCTACA GGAATGANIT  
 CAGGGCATGG ACGGACATCA AGCCTGTNAA ACCAATAAAG GCCAAGCCCC AGTACAAGCC CCCAGATGAT AAGATGGTTC  
 ATGAGACCAG CTACAGTGCT CAGTTCAAAG GAGAGGCCAG CAAGCCAACA ACAGCTGACA ATAAGGTCAT TGATCGCAGA  
 AGAWTACGCA GCCTCTACAG CGAACCCCTC AAGGAACCCC CAAAGGTGGA AAAACCTAGT KITCAGAGTT TCAAACCAAA

SEQ ID NO:1035: (Length of Sequence = 375 Nucleotides)

TTTTTTTTTT TCAGTGGAAA ATAACITTNA TTGAGACCCC ACCAAGTCCA AAANCTGTNC CTGGCATTAA GCTCCTTCIN  
 CCTTTGCAAT TCGGTCTTTC TTCAGTGGTC CCATGAATGC TTCTNCTCC TCCATGGTCT GGAAGCGGCC ATGGCCAAAC  
 TTGGAGGTGG TGTCAATGAA CTTAAGGTCA ATCTTCTCCA GAGCCCGCCG CTTCGTCTGC ACCAGCAAGG ACTTGCGGAG  
 GGTGAGCACC CGCTTCTTGG TTCCACCAC ACAGCCTTTC AGCATGACAA AGTCATTGGT CACTTCACCA TAGTGGACAA  
 AGCCACCCAG AGGGTTGATG CTCTTGIMAG ATAGGTCATA GTCAGTGGAG GCATT

SEQ ID NO:1036: (Length of Sequence = 304 Nucleotides)

CTCTATGTCT TCTTCTTTTT GCTTCTCTC AAGTAGAG : TGACTTTTTT GAAGTTAGC TTCTTCTAAG AGTTGCATGC  
 TATTNCTGGC TCTTACAATA GCTCATATC TCTNATTINC TAATTCATTG CACTTTGCTT GTAGCTCTCT GGTCTGTTTT  
 TCCAGATGTG TATTNCGGN TCINAATTGG TTGGCTTCTT GGATGTGCAC ACATAATCTT ATTTCTAATT GTTTTATACT  
 AGACTGTAAAC TGCTGTAAAC GGCTATCTGA TGCTTCTCT CTTCATGGG CAGACACCAC ATCC

SEQ ID NO:1037: (Length of Sequence = 341 Nucleotides)

CTATGAGGAC CAGCAATTAG ATTTTATAGC AGTACTTCCC ATTAAAGTGA ATAACCAAAA TCACTTTAAG GTCAAGATCT  
 TAGTCAATAC ATTATGTAAA ANCATATACA ACAGACAATA CACCAGAAAC TAAATCTTTT GCAACCTTTT AAACCTATGA  
 TGAAAAACAT TAATGTCAGC TCTAAAATGT ATTAAGCAGT TTTTACAAAA AAAATGTATA GAATACAGGA GCCAAAACAT  
 TTANCAATTA CCTAAGTTG CTGACACAGA NTAATATTAA TAAATAATAC TGATCANNGN AAAGTAATCA ATTTGAAAGT  
 GGTGGGGGTA GAAGSACAAC A

SEQ ID NO:1038: (Length of Sequence = 281 Nucleotides)

GGAGGCTGAG GTGAGAGGNT CCCTTGGGCC CAGGAAGTCA AGGTGTCAGC AAACAGTGAT TGCACCACTA CACTCCAGCC  
 TGGSCAACAC AGCAAGATCC TGTCTCAAAA AAAAAAAAAA ATATCAGTAT TGTTTTATTA ATTGTAACAA ACACACTAAA  
 TAAATGTAAG ATGCCAACAC TAGGGGAAAT AGGATNTGGN GTAAATGGGA ACTCTCTGNA TCATTTTTGC AACITTCCTG  
 TACATCTTAA ACTATTTTAA ATGNTTCTAC AAAAGTTAAC A

SEQ ID NO:1039: (Length of Sequence = 246 Nucleotides)

CCAATGATGG CAAACATGAG GATGGCAAAG AAGAGAAGCA GCCCAATCTG CAGGAGTGGGA ACCATGGCCT TCATGATGGA  
 CTTGAGCACC ACCTGCAAAC CTGGGGCCAG AACAGGGCAG GTCAGGAAGC AACGTGGGCA GGTAGGGCA AGGAATTTNG

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TGGGGGCAGG GACAGANCAG CAGGAACCTA GCAGGACAG CAAGGTGCTA AGCAGTNAGT GCTTTCAAGG GCAAAGGTTA  
GAGCTG

SEQ ID NO:1040: (Length of Sequence = 399 Nucleotides)

GAGGTCAAGA AGAGCTTAAG AAAATATAGG AGATACTACA GCATGTTTGG TTCAATGACCG GAATGATTTA GTAAGAAGGA  
AAAGCCAATA ATGTAAGAAA GGGGATTGCA GGAGCAAAGA CTTTAAGGAA TAAAAAGNC AAAATTGTTT GTTCTCAGG  
GAAGTAATGA CAGGGGCTGA GCAGGAGCCA GGAAACCCAG CTTTATAGCTT CAGTCTGCC TGACATTTAT TGGTCATGTG  
GCTCTGGGTG TATTCTCACT TCTCTCCCT AAATAGCAAG AAGGAAAAGC CTCITGGAGC CTCGTGTCTC TGCTTCTTTC  
TGTACAATGG TTATGTTTCT GNTCCGCTTA GCTGGTTAAT TATAGAATCA CCTTNGCTGG GGTCTTTTGG GGACTGGCC

SEQ ID NO:1041: (Length of Sequence = 324 Nucleotides)

CCATAACAG TCCGTCACTG ACAAATGTTG TTACGCAGCA CATTATATGC AGTGTGTGAC CATACACGAT ACACAGAGGA  
AATTCAGGGC TTCTAGGAAA CCTTCTAAGG CCTCATCTCC CTAAGGGCAC CTGATGAGCC ATTCTCACC CTGCACTGC  
ACCAGNCTC CAACACCACC ACCAAGGCTA ACCGCTGTGC ACTCTGGGCC CTGGGTCTGC AGTACCTGGC TCCCAAGCAC  
ACCAGCATCT GAAAACTTGN CATCCTTGCC GATNTTNGG GGAGTATTGG TTGATTGCAG TGACAAATCG GCAGAAGTTC  
CGGG

SEQ ID NO:1042: (Length of Sequence = 212 Nucleotides)

ATCTGTTTCT CAGAGATGAC ACTGCCAACA ATCAGAGATT TGCATACAAT ACAGTTATGT ATTGGCTATT CACAATTAC  
AGTAGTGTGTT TTCCCTCTGA AAAATATAAG TNCAAAAGCT AAGTAAACAA TENGSTACTG CCATTGGGN TTTTTACAT  
GNCCTTAGCT TAAAGAACTG GTCTTTAGCA AATATTCAAC AGTCAACCT GA

SEQ ID NO:1043: (Length of Sequence = 329 Nucleotides)

ACTTGGAGAA AGAAAAATTA GAGAATTCCA GATCCTTAGA ATGCAGATCA GATCCAGAAT CTCCTATCAA AAAAAAAGT  
TTATCTCCTA CTCTAAACT TGGATACTCA TATAGTAGAG ATCTAGACCT TGCTAAGAAA AAACATGCTT CCTGAGGCA  
GACGGAGCTA TTCCAGATGC TGATAGANCC ACTTTAAATC ATGCAGATCA TTTATCAAA ANTAGTNCAG CAGCAAGATG  
AAGAGCGAGC TCGGCAGCTG AGAGAGAGAG CTCGTGAGCT AATAGCAGAN GCTCGATCTG GAGTAAAGAT NTCAGAACTT  
CCCAGCTAT

SEQ ID NO:1044: (Length of Sequence = 285 Nucleotides)

GTGAAGCTG TTTNATTTT ACACCTTCT GTTTTAAAC ATAGGGACTG ACAGGGAGAC CCAGGGCTGC AATCTGGGTG  
GTGCTACATT TGTAGACAAG GACAACTTGC TGTATTTTAA CCCAGAAACA TTAGAAAGTT TGTCTTGAA CTCTGGCTC  
AGATTAGAT GCATCTTTGA AGTCTGATA TTGGCTTAT CTGAAGCTTT GGGATTATCA TTNCIAGTT ATGAAGGGAA  
TGAAAGTGT CATAACATTT TTGCAGGTGG AAGGTAAAGT TGTG

SEQ ID NO:1045: (Length of Sequence = 317 Nucleotides)

TCGGTACTG TAGTATTGTA GTATAGTTTG AAGTCAGCTA GTGTGATGCC TCCAGCTTTC TNCITTTTGC TCAGGATTGT  
CTGGCTATA CAGSTCTTC TTGATCCCA TATGAAATTT AAGTAGITT TTNCIAATTC TGTGAAGAAT GTCAATGGTA  
GTTTCATGGG TATAGTATTG AATCTATAAA TNATTTTGGG CAGTACGGNC ATTTTCATGA TATTGATTCT NCCTATCCAT  
GATGATGGAA TCTTTTCCA TTGTTTGGG NCTTCTCTTA TTTCTTGAG CAGTGGGTTT GTAGTTCTG GACAAGA

SEQ ID NO:1046: (Length of Sequence = 316 Nucleotides)

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CCAGGTGCAA TCTCGGCTCA CTGCGACCTC TGCTCCGCG TAGTGGGACT CCAGCTGTGC ACCACCCAGT CAGCCCCACG  
 CCCACCCTGC CAGGCGTGTG CACGETTCAG CGTCACTTTA CAGATGAGGA AACTNAGTCT TTGGGAAGCT GACAAGGTGC  
 CTGACACAGG CCAGGCGAGG GNCCACCTC ATGGGCTGTG CTGCAGCCTC TGCTCGTGG GTCACGGCAC CCCATCTACG  
 AGGNGCCCCCT CAAGGATGCG CCGTCGAGTN CCCGGGGCCC TTGGCATGTN CTTGSCAGAG AAGGCAGCTC AGGGGT

SEQ ID NO:1047: (Length of Sequence = 261 Nucleotides)

CTTCCTCAAA CTGGGTTC AGCTGGGTCT CAAACTCAGG CTCCAAGTGG GTCTCAAACT CGGGCTCCAC CTGGTCCCA  
 AACTCGGGCT CCACCTCGGT CCCAAACTCT GTCACCACCT CTTTNTAGGT CTCANICTCC GACTCTCTCC AGCCAGCGGT  
 GGTTCGGCGT ATNAGGCCCC AGGGCTCTAT GGTAGTGCTC AGGGTGTGTG GCAGGGGAG GGGGAGCGT GGGAGGCACA  
 GTGTNGGGGG CCTAGGGTGG T

SEQ ID NO:1048: (Length of Sequence = 390 Nucleotides)

GAGAACAAG AGAATGGAG CCACATACAA TGGAGTAACA GAAGCTTTGC CTGTAGCTCA AGAACCAAGC CGAGAATCCA  
 CACCTCCTGA TTCACAGTTC AGTATTTTCG GCCACTTTAC TCAAATATTT TTATAAATTA TTTTAAATC GGCAAAATAT  
 TTAAATTTCA TCCATTAAAT TTAAATTTCT AGATGCCCTA GTGGCATCCA GAACACATAT TINGGGGAAA ATATCTCTAAT  
 TTTTAAAC AGAAAAAGCT AGGNNCAGAT GATGCATTAA AAAAGTAGAA CACAGAGCTC TTAATTTAGG AATGATCAAA  
 ATAGGGTTGA TTCAACTATT ACCTTCTCCT AGGGATTATG GATCAACCCC TAGCAGCAGN CAAAGTCACA

SEQ ID NO:1049: (Length of Sequence = 335 Nucleotides)

AACTCACAA GTAAAATAAT GCATATTTAA GGGAAATATT ATACAGACTT TTTCACACAG AAGTACATAA TANGATTTTT  
 TAAAATCTAT TGCCATTCAT TTATTTTTCG ACAAAAACGT ATAAATATGT CACCAGCTTT NCTTAACCTA AAAAATTTAA  
 ATAAAAGACA CCAGATGAAA ACTACCTTT GCTGCCATTT TTTTAAAGT TTTTGTAG GGGTTTTTA TTTTGGGT  
 TTTTINCTT TTNCTGCTTA GAATTTGGGT TCTAGGGAAG AAAAGCCCCT GCATTAAAA CAGNCCATTT AAAAAAAAAA  
 TTCAAAGTTC TGGAT

SEQ ID NO:1050: (Length of Sequence = 265 Nucleotides)

AAAGGGAGGG AGGGAGGGAT GTGGAAAATA TGCAAGATAA ATTAAATNCT TAGTTAAAA AAAAAAAG TTTACCAAC  
 TGINCTCCAT TACTGAGAAG CCCCCACTT GCCCCACTGT GCATATTCCT AGTATTTTCAT CCATGTCCTG CTCGTCTGTG  
 CTGCCCTACA AAAAANCCCT CCCGGGGGGG AAAAAAANC AAAAAANCGG TGTAGTGTGA ACTGCTGAAG AACTTAAATG  
 TTCAAGNGCA TCTTTAAAGT CTAGG

SEQ ID NO:1051: (Length of Sequence = 298 Nucleotides)

ATTTCTAAAA TGCTCTCAA TACTAATATT ATACATTCTC CCATTTATCC TCAAAAACC CATGAGACTG GTGATGTAAT  
 TNCITGTGTC ATTTACAGC TGTGGCAGT AGTCTAAGA CCAAGTGATT TGCTCAAAGT CATGGAACAC TTAAATGGCA  
 GAGCTAAGGC TTAAACCCAG AATTAAAAA TTTTTTTNAG CTCTCTGTTT TTNCCATTAT ACCAGTTTGG CCTTCATTT  
 TATTCATGGG TTAAATTAAT TTATGGTAAC AAAGGGCCCC TGGTCACTTT GGACATTT

SEQ ID NO:1052: (Length of Sequence = 359 Nucleotides)

AAGGCAAACG TGTACATCA TGACACCATG GGAATGACTC ATGCCAGCCA TAAAAAGAAT GAGAATTCTG TCCAGAATTG  
 GTTCTTCCG GTGGGTTCCT GTCTCGCTG ACTTCAAAAA TGAAAGCCAT GAACCTCGT GGTGAGTGT AACAGTTCCT  
 TCAAAGATGG TGTGTCCGA GTTNTTCCC TNCAGAAATG TTCAAATGT TATCCCAAGT TTCTTCCCTT CTGGTGGGT

CGTGGTCTTG CCTGATNTC AGGAGTGGGA GCCGAGAAC CTTTGCCTGT GAAGTGTAA CAGNNTCTTT AAAAGGTGGG  
TGGCATCTGG GAGTTTGTTC CATTTCTCC CAGTGGGG

SEQ ID NO:1053: (Length of Sequence = 195 Nucleotides)

GTGCAAAAT TGTATCCCA GTGTGGCAG GTGGGGTCCC AATGGGAGCT ATTTAGGTCA TGNAAGGTGG ATCCCTCATG  
AAATAGATTA ATGGCCCTCC CTCCAGGGT AAGTGNAAIT NCTCAGCTG TTAAGTCCC ACTGCAAGAA GGTGGTTGAC  
CAAAAAGAAG CCNCGTGCCT CCCCCTAACC CTGA

SEQ ID NO:1054: (Length of Sequence = 319 Nucleotides)

ACAAAACCAG ATGTTCTCAC AAGAGCCCT GCTTGAGAT CACTTACATA GTTTTGGGG AAGCCAAGAT CGAAGATTTA  
TCCCAGCAAG TCACAACTAG CAGCTGCTGC AGAAATCAA AGTTCAAGGT GCAAGCTGTC TCAACATTG CAAGCAAAAC  
ACACAGTACT TCCAAGTGT ACAAGAGGAG GAGTGCAAGA GGAAGAGGT CGCTGAAACA GGTGTTAGTA AGTTNAAGGT  
ACATAGANTT GGTTCATGTT CACAAGCAA TGTGTTGAG GGNCAAGGN CAGTTCCGAG CCTGTAGT AACACAGT

SEQ ID NO:1055: (Length of Sequence = 205 Nucleotides)

AACTCAAATA GGAGCTAAAA AAAAAAAAAA GAATCAATGA AACAAAAAT TAATTTTTTG AAAAACTAA ATTGATAGCA  
CTAGCTAGAC TAACCAGCAA AAAAGNTAG CAAGTACCTA AATGAAANC TGNAATGNA AAAAGGAGGA CATTTACAA  
TNAACACAGG AAATACAAAA GTTCCATGCA GCGAATTAT TCAG

SEQ ID NO:1056: (Length of Sequence = 165 Nucleotides)

TGCAAAATTA TGATTTCTGC TTCACCAGAT TGGTAGAATG TATAAGATGG TGCATGGGA AGCATTTAAT ACCCAACAAT  
ATCTGATTAC ATTGAAATCA CAATGSCCTC CCTATCAAAT VAGTAGCGTT ACTGTTTGAG CCTGVAAAAC TTTGAAATA  
ACTTG

SEQ ID NO:1057: (Length of Sequence = 203 Nucleotides)

CTTTCATTCA AAACCCATCA CAGAAATGGA CAGCTGGGT CTGTAACAAA GCATTCAATG TTTAGAGCAT AGGTCAGTAA  
TTGTATATGA GAGCATACAC TGGCTACATA CAAATTAAT GTTCAGNCC ACACTTTIN CAATGTTTAA AACAGGATNA  
AGCCTTCCCT GTGAAAGCA GCACCTTGT GAACGGTCT TTG

SEQ ID NO:1058: (Length of Sequence = 201 Nucleotides)

AGTGCAATAT GCACATTACT AAGCACAAA AACAAGTGT ATTGAGAACT ACTTGCAATT TTTTATGTTA AATGCCAATG  
AATTATTATG CCTTAGTTTT ATGAACCTGN CTNCTCCTG TGCAATTCCT TCCTTGCAA TGAATTGACT TNAACGCGT  
NAGTGAATAG CCTCAGNCTG TAGGATGTCC TTCAAATTT T

SEQ ID NO:1059: (Length of Sequence = 176 Nucleotides)

CCCACTGGC TACATACATG TTTTCCAAAT TAAGTTTCT GATGGCTCAT CATTTGCCAT CTCTTCAAAT CCAGGTCTCT  
TTAAAAATCT ATGACCTTGG AATGAATGTG CCAGAATACC TGTATCCTGG AAGTCCATGC GAATNITGGC NTCGACTGCC  
ATCCGCCATC TGCTGG

SEQ ID NO:1060: (Length of Sequence = 277 Nucleotides)

GTCAGAAGCA GTGTACAGT ATTACAGTCA GCCACAGAAG CTGTGTGGG GGACAAGACC CAATCCTTCC CCACACCAGG  
CAAAGCAGTA TTGGACATGA GTTGGCATGT GGCTGGGCC ACGTCTTAT CCCCAGGNC CTGNGGGGAG ACCACCTTTC

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TGAATGGTTA ACCAACCCCT AGGCTACCAC TCTGTATTTC ATCAGGGGTA GGGGTATTAA ACCCCACATG CAAGTAAGGA  
ACCCCTGCCC CCAGTGTGCA AATGGGATGG GGATGCT

SEQ ID NO:1061: (Length of Sequence = 206 Nucleotides)

AGAAAGTAAG ATTCTCAGGG CAACAGTGTA CAGCAGAGTG GTTGCTCCAC AGACAGAGGA GGGCAGAGTG GCCCAGAGTA  
TCAGCGTACA GCAAAGTGGG TGTTCCATC CACAGGGGCA GCGCTATCTC ATAGGANAGA ACAACCCCTA GGAAGGCAAG  
CGTCAGNCAG NCAGCAGTGN AACAGTCAAC AGTTAGCCAG TGTCAG

SEQ ID NO:1062: (Length of Sequence = 316 Nucleotides)

TTNCCCTCAC AGAGTTTTAG TTAGAATCAC TTTCTCTATT TCCACAAATC CTTCTTTTCT TTCCTTTTAT TTTCTAAAGT  
GAATGTCCAA GCAAAAAGGA AGCAAAAATG GTCAAAGATC TCTCTTACAA TATAGTAATA AATTTATNCA AACAACTTGG  
AATTCACCCT GTGCATTGAA AATNCAACTC CAACTGCAA ATTATGGCAT TTTTCCCN CCAAAGGAAT TAGTGAAGTC  
CATTGGATGC ATTCATACTN CTGTTTAGGN AATAAGGGAA ACCGCTTTGT AAAAGTNCAA CATGGCCTAG GAGTTA

SEQ ID NO:1063: (Length of Sequence = 314 Nucleotides)

ATGATCTGGT TTATGCTTCA GAAGAAGCAT AGTAGCTTCT ACAGAAAATA AATGATAGAA GGCAAAAGAG AAACATGGCG  
AGTATTCCAC TCCAGTGTCT AGTCAAGAGA TTACAAGGGC CTGGCATGA GGACAACAGT AGAAATNGTT AAAAGTGTAC  
TGGATTGCAA AATATTACTT TTGGGCCAGG GCGCCGNGG AACACGCCT ATTAATACCC AGCACTTTNT GGAGGTGCAG  
GGAGTTNCGA GTACCACTCC TGGGCCAACA CGCTGGAAA TCCTGTGTA AAATATAAAA ATTAGCCGGG CCGT

SEQ ID NO:1064: (Length of Sequence = 322 Nucleotides)

GAAAGCATTT GAACCTAAGT TGTAAAAATG GCAGATAATA ATTAACACTT GGTAGCAAGA AACGCTTTCT GAAATACTGG  
GAACACTGAC TTGTTTCACT GTAACTTATC ACCTAGTGCT GTATCTGCCA TAGTGCTCAC AATTGCAACT TTATATCCAA  
CATGGGTGTT CCATTTCTAT TTGGATAAAA TTTACTGGAA ATATACTAGC AANGAAAAAC TGGTCTTAAA ATGGCAAAG  
GCTCTGGCAC TAAATTCAC TCTACTTAAC TTAGTTTACT AATTAACCTC CTTAATTATA GTTTTCCAA TCCGATGCA  
CG

SEQ ID NO:1065: (Length of Sequence = 297 Nucleotides)

CCCTGNCAAC TCCTTGCAAG GACTGATGCT GGAACCTGGG TCAGGGAGCT CCAGGAGGAA CCAGACAGGN TCCTGTTAGC  
AGGCTACCA CAAGTTCTAA AGGGCACCAG CCTTGAGAAG GGCAGTTGGG ATGTGGCCAA ATGTGAAGCC AGGTTTNTG  
GGATCCTGAC TGTCCCAGGT TACAAGTTCC TGGCCACTCT GTGAACCTTG GGCAAGTTAA CTTCCAACCT CTTTACAAGT  
TCCCTAATCT ATNAGGAAAC ANTITAGTAC ATGACCTTCA TGGGAATTTA TTTATGA

SEQ ID NO:1066: (Length of Sequence = 267 Nucleotides)

ACAATGGGAC TGTCAGAGCA GCCAGCTCCT CCTGACTGC TCCACAGGAA GAGCCATCAA CAAAGCCAAT CCCTGGAGAT  
AGGCTCTGAA ACCAGGATAG AGACTCCTTC AATGGCTGCT GNTGGTTCCA CCATGTATCA TCCAGAGNAA TCACCTGNG  
TGGSCATAGG TGGGCCTGGG AATCTAGGGC ACAGCAATTC CACACATCTT CACCTAGAAA CCCTCCTTCT GGGTGGGCCT  
GCATGGTTTC ATGCTGTAA ATCCAG

SEQ ID NO:1067: (Length of Sequence = 220 Nucleotides)

AAAATGCAAT TGGTTTGTTA CTGAGTACTA TTCGTGGGAA GACAGCATCC TGNACTCCCT CTCTACAGAA TATTGGGAGT  
AAAAATGAAT GTCATCCCCG GTGGGAAATA TTATTGGGGG TTGGAAGCAC AGAGCACAGG AAAAATTAAG TNCAGGAAAC

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AGACACTAAG AGTGCACTGG GCAGGTCTGA CTGCAGGTGA TGCAACTTGC CAGCCGTGGT

SEQ ID NO:1068: (Length of Sequence = 412 Nucleotides)

TGGCCAGCAT CTGGGAACIT TGGGTGTGTG GACCAACTTC TTCCAACAG TGCGCACTGA TGGCCGGGGC CCCAGCCAGG  
CCTGNCTGGA AGGGTCTTCC CCGNCCCGAG GGA CTGTAGG GGGTCTCTAG GAAGCATCAC ATCAAGGTCC TCAGGTTAGA  
TNCAGGNCAG CCCATTGACC CATTTNAGGG GACAGCTGGA GGAAGCCCCG GAGTCCCTTG TTTCTTCAGC TGAG

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TCGCTCATGA AGATAATTTA ATGCTAGACT GATTTCGCA GAGTAAAATC TGGCATGINC TTCAGGAAGT TTTCTTTGTC  
GCTGCATATG AAACATTAGG TCTCCTCCAT TTACATACTC TATAACAAAG AACAACTCTG TTTCTGTCTG AAAGCAAGAA  
TGCAGCCTAA CAAGGAAAGG ATGATTGGAT GCCTGCTCAA ACACATGCTT CTCTGTCTGT ACCCAATCAA TATCCTCATC  
ATCATTAAAC AGCTCTTTTT TCACAACCTT CATTGCATAA ATACGATCTG TTTTTTTTAA TOGAACCAAC AGTACTTTGG  
CATAACTTCC TCTTCCCTATT ACCCGGAGCA AATCAAAATC CTGAAGACCT AGACTGGATG AAGCTTTGCA CTTTCCCTGG  
NGTCATTGCC TC

SEQ ID NO:1070: (Length of Sequence = 358 Nucleotides)

GTGATTGINC CACTGCACTC CAGGTGGGT AATGCAGCGA GACTGCGTCT CAAAAAATAA ATAAATATAA AAAAAAAAAA  
AAAAAAAAAA AAAAAAAG CACCACCGCA CTCACGCTG GGCAATAGAG TGAGAACCTG TTTCCAAAA AGAAAAATNT  
TAAAAGANTG ATCTNGGCCA GCGGTGGAGG CTCATGCTTG NAATCCCAGC ACTTTGGGNG GCCAAGAACA GGTGGTTTAC  
TTGAGGNCAG GAGTTCGAGA CCAGCCTGGC CAACATAGCA AAACCCCAT CTNTACTAAA ATTACAAAA GTTAAGTGGG  
CATGGTGGTA CATGCCCTNG TAATCCAGT TACTTCCG

SEQ ID NO:1071: (Length of Sequence = 411 Nucleotides)

CTATTTATGA ATTCTGSCAT TGGTTTCGAA AACTCAACAC AGTTAAATGA ACAGGAATTG AAGGTGCATG ATGGATGCGT  
CCCTCATAGC ATTTAAATCT CTTCACCTTG ATTAAAAATT CCTAGTTCTT CTTCACCTGAA TTGTTTAGAG TTTTINAGCA  
GCCTCTGCCC TGATTAAAC AAATTAGCAT CAAAGATCCC CTGTTGAATG AGAAATCATT AATTGAGAAA CATGCAATGC  
TCCTTAATTA CTTTTAGAAC AGTGAGAGAA CAAATAATCT CAGGTTCCAG AGGGCCCTGC CTGCTCTGCA CCGTGAAGTC  
ATTTCTGTGA GCTGCTGGAA TAAACTCAA GTAGGCAAC ACTATTTGGG GAATATCAAT GCAAGCTTTC AGTAAACACA  
CTGTAGGATT G

SEQ ID NO:1072: (Length of Sequence = 342 Nucleotides)

TCCCATTTTT ATAATTATTG GAACATGAAA CTGTATTTCT ATGAACCTCA TGATTTTTTT CCATAAAATT ATATGCTAAG  
AGAGTCACCA CAAACTATG AATTCTCTCC CGAATTATTT TTGCTTCTTT GGAGCACCAT AGTCTTTGTT CAAATCACA  
CATGAACTG TTGCTGCAAT GCTAAAGATG TGAATCCACC ACTATCAATA CCGTCAGGGT AAAACCTGGA GCCACATGTT  
ATTCAAGTTA TTTTGTAT CTAAATGATT ACATGAAAAT AAAATAGTAA GCCAATATTA AATTGTAGG CATAGTTGCC  
CCACCTNAAA AGTGTTTACA AA

SEQ ID NO:1073: (Length of Sequence = 217 Nucleotides)

GTTTTCTGTC CTGGCTAGGA TAATGCAAGC NCTTTTCAGA TGANTCAGAA TCGAAGAAAA TACGCTGGTA AAACAGGACC  
TGATTTACCA GNACTAAAC AATTCACTC CCATTTCCAT TGCTTTCAAT ATTTTCACAC GNTACACGAA CCTTTAAGAT  
GGAAAGGGAA AGCGATTTTT TTTTCAACAA GTGGGCCACC AGATGAACCA AATTAGA

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SEQ ID NO:1074: (Length of Sequence = 379 Nucleotides)

GGTTAAAAAT TCATCGGAAT GTATAAGCTT ATTTATTAGT GTATTTAATG GTTCATCAAT TGATAAAACA GGTGTAGCAA  
 ATACATGCCT TCCTTTTGGG GGATGGGCTT GGTTAATCTC CAAATTGGCC GTTTGGAACA ACTCATCATT ACTGTACAAA  
 GAAGGTACCA CTGGTGGGA ACTTTCACIT TTAAACAAAA CTGGTTCATA TTTCTCACTT GCATAGGAAA TGGTCAAACC  
 TTGAAGTGAA GCAGAGTGCA TATGAGAAGT AGGCGACACA TCAAAACTG GTACAGATGT AGAGTGCAGC ATGTTTTCAC  
 TTGAAGCAGA ATTTGATACA ATGAGGATGC AACCATTGTA GANCTAAATT TATCAACTT

SEQ ID NO:1075: (Length of Sequence = 345 Nucleotides)

ATTAAGTTGA CAGTCCAATC AGAAATATTT AAACAAAGTT TCACTACTTA AACACCATCT AAATATACIT TTTGTATAT  
 TCCCAGCAGA AATTGATGGC AAGGAATCAT ATATCCCATC AAAACCGTAT TTTTCCCCCT AAAAGGCAGT TTAGATGTNC  
 TCATTCTAGG NTITCCATCT CTCCTCTCCA CCATTCCAAT TCCCAGAGTA CCTCTACAAA TATCCCTGCT TACCAGTAGA  
 NCTATTGCT TTAACAATCT TTCTGTGGT AAGGAGATGC ATATGCCAAT GTGAAACTA TGGAGGGGA CTCCTGCCIT  
 CAAAGGCTGA CTAGAAACCA TTGGA

SEQ ID NO:1076: (Length of Sequence = 286 Nucleotides)

TTTTTTTGA GATGGAGTCT CGCTCTGNG CCCAGTGTGG AGTGCAGTGG CATGATCTCG GCTCACTGCA AGCNCOCCT  
 CCTGGGTTCA TGCCATNTC CTGCCTCACC CTCCGAGTA GCTTGGACTA CAGGCGCTG CNACCAGCC CAGCTAATTT  
 NTINTGTGTG TGTTTTGGC AGAGACAGG TTTCACCATG TTGGCCAGAA TGGTCTCTAT CTCCTGACCT CGTGATCCAC  
 CCGCCTTGGC CTCCCAAGGT GGTGGGATTA CAGGCGTAAA TMACCG

SEQ ID NO:1077: (Length of Sequence = 366 Nucleotides)

TCACATAGGT CACATTTAC CATGAAACC TTTCTAAATT ACCTTTGGCA TTINTGCTT ATCCTTCTAC ATCATCATAC  
 TTCGTCAATT AAAGTCACTT TTTTGGGTAA CATTTAGAA ATTGGGATTC CTCTTACAAT TGCTATCAGA CAGAAGCCAA  
 TTATGATGTT GTCAATGCTT ACACATGGN AAATAACAAA ACTGCCAGCA TGACATTTGC ATATGACAGT CAACAGCCTG  
 AAAGAAATTC CCAGAAATGA TACTGGAGCA TTCAATTCAC CCTCTAGGAN CCAATGGAC TNGGAAGGAA GTAGAAGATG  
 GGGAATCCCT AAGCAGCAGT CAAAGTAGGC TGGCTTTTCA TAATT

SEQ ID NO:1078: (Length of Sequence = 380 Nucleotides)

GTTTAAGTGC GAAGATTTTA TTAGGCGGTA CAATCCAAG GTGGTAAGGG TGAAAGGAAA GGCGAAGGCA GGCAAATACA  
 TTATTGAGCT GAAAACAAT TTACATTCAA GGACAGCTTC CAGACAAGCC ATGTAGAACC AGCATGCCIT GGGACTGTNT  
 GGATGGCAGG GAGACGAGTT TCTATGCTGA CCACTTCATG CTTTCTSCC CCTTTGGGGA AAGTATGCCT CAGGACCTC  
 TAACTCTCCC ACTTCTCTGG GGGCAGCACC TGACCCCTCC CGGCAACTNC TAGGCAAGAG CATCTGTTC CTTCAAATTT  
 YTCACCTGAG TCTGAGTCAG AGCATYCCAT CATCAGAGCC TCTGTCAAGG AGGCAGTGCT

SEQ ID NO:1079: (Length of Sequence = 439 Nucleotides)

CTTAAGTTAC TGAAATTGAA ACACCCCTTG TCCTTCTCGG CGGCGGCTC CTGGTCTGIN CTTTACTTGG CTTTTTCTC  
 TCCCGTCTTA GCCTCACCCC CTGTCAACC AGATTGAGTT GCTATAGCTT GATGCAGGGA CCCAGTGAAG TTTCTCCGTT  
 AAAGATTGGG AGTCGTCGAA ATGTTTAGAT TCTTTTAGGA AAGGAATTAT TTTCCCCCT TTACAGGGT AGTAACITCT  
 CCACAGAAGT GCCAATATGG CAAAATTACA CAAGAAAACA GTATTGCAAT GNCACCATA CATAAGGAAC ATTGAACITG  
 TAGAGGAGTG CTCTTCCAAA CAAAACAAA ATGTCTCTAG GTTTAGTCAG AGCTTTCACA AGGTAATAAC CTTTCTGTAT  
 TNAAATCAGG GTAACCCCTT TCTGTATTG AGTGCAGTG



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SEQ ID NO:1080: (Length of Sequence = 419 Nucleotides)

CTGAAGTCCC TGAAAATAGG AAGTCTCAAT TAAAAAATCA ATTTGTCATA GTCCACATAA AGATAATCAA TACATTTTGC  
 TCTCAGTCTT TGGGATGGTT TTGTAAATA ATATTATCTT GACAAAAACA AACAGGAAGA TCCCACCCCC AACACATACC  
 ACATTCCAAT GTTACCTGNN ATTAAAATAT ATACCAACAT GCATCTTTAG GTTACTCTGG TCCATGGTTT CCTCCAGTGG  
 CAATGGAATT TACAAAAATG TAAGACGTAA TAGATATATA ATTATCTTTT TNCCTAAATG AAACCTAGCCT TAAAAACTGG  
 TACATAATGG TTCTGGGTT CANTGATCAA AATTATGGAN GTACACTTAA CCTATCTTCC ATTGAGTGGC TTTAAATGGG  
 ACCTTAAACT GTGGACTCC

SEQ ID NO:1081: (Length of Sequence = 411 Nucleotides)

CAGCGTTTAA ACCAAAGGCG CACTAAACCT CGTAAGCGCA TGANCAGATT TAAAGAGAAA GAAAACCTCTG AGTGTGCCTT  
 TAGGGTCTTA CTTCCTAGTG ACCCTGTGCA GGAGGGGGCG GATGAGTTTC CAGAGCATAG AACTCCTTCA GCAAGCATAC  
 TTGAGGAACC ACTGACAGAG CAAAATCATG CTGACTGCTT AGATTGAGCT GGGCCACGGT TAAACGTTTG TNATAAATCC  
 AGTGCCAGCA TTGGTGACAT GGAAAAGGAG CCAGGAATTC CCAGTTTGAC ACCACAGGCT GAGCTCCCTG AACCAGCTGT  
 GCGGTCAGAG AAGAAACGCC TTAGGAGGCC AAGCAAAGTG GCTTTTGGA TATACAGAAG AATATGATCA GATATTTGCT  
 CCCTAAGGAA A

SEQ ID NO:1082: (Length of Sequence = 350 Nucleotides)

CTGTGAGGGC ACAAGTGTAG GTATCTTINC AAGTTCCTA GGIGATTCTA GAATGCAGCA GGGTTGAGAT GCTCTGCCTT  
 AGGGGTAGAG AGGTGGGAAC ACTGACAGGT TCTGCAAAC ATCTCTGAAC AGCTGCTGGT GTCTTTTTCT GTACTTCAAG  
 TTTACGGCA CATCTGATAG CTGTNCGAA AGGGAAGAGA GAATTACGTG GGCTAGGCTG GTTTGAAGGT TTGCNTAAGN  
 TTTGGCTTGA GCGACTTTAA CAGTTTATT TCAAAGTAAT TTGTGTTGT AGCCCCACTA AAGTAATTTT GGGCCAGNAA  
 AGGTTCAAAA TACGGTTTTT CCTACTTAAG

SEQ ID NO:1083: (Length of Sequence = 430 Nucleotides)

GTGAAGTCCA CCTGCTTATG GACAGCCCAT TTGCATGGGG CCTGCGTGT GGTGCAGCCC AGGGTATGTN AGGAAGGCCT  
 CANAGGAGCT GCTGCTGCCA CAGGTGGTCA CCAGGGCAGA GGTTACACTG ACATACCTCC AGACCAGCCC GCTCCACTGT  
 GGACAGGGGC AAGTACATA CCTGCTGTTT ACCATGGGGT CACGGCAGAA CCTGINTCAC GGGGTGCTTT GTGATGCCAA  
 ATGGATATAG GTGGGACGTG CTGGCAGCAG CGGCTCAGC GTGAGCCAT CTCCCCTCCC GTTCGTCTCC GGCTGCGCTG  
 TGGGCCIAAT GGTGGCACCG TTTAAGCANC TGCTGTGTG TCAGCCTGGG GGNCTGAGGG TTTCCATACA TGATCACTGG  
 TTCTACCCA AGGCCTTAAT TCCTNCCTGT

SEQ ID NO:1084: (Length of Sequence = 369 Nucleotides)

AATGGAAGAA GTGAAAAGA ACAACACAAA GAAAATAAAG AAGTAACCTC TTTACCCAC TGAAATAATC TCTGGAAAAG  
 ATATTAGCAA TCATGCAGCT TATAAATATC TAAAGGGCTA GAATTGAGGA ATTTATAAGA NTAAATTTTT TTTTCAACAC  
 ATAAAATACA ACATGGGAAA TAAGATGTTT TTACTAACA GGCAACACT TGAGGNGTCC TCTTCAAAGA CTACAGTGA  
 TGAAAGACCA GTTATCCAAA GGAAACGGTT AGTAGAAATA TAAAGTTAGT CCCACACAAA ATTAAAATGG TGCTCAATGC  
 AGATTATCTA TCATTANACC ATTTTAAAG GCAATTTNTT ATTTAAAT

SEQ ID NO:1085: (Length of Sequence = 413 Nucleotides)

ATACCTTINA GCTGGCATAA TTTAAGTTT TAATTATCCC TTAATCATAA GCTGTACGAT TCTATAATTA AAAAGTTAAT  
 GCCTTCTTAA TGTCTATNCT AGTAGAAGAA TGATGAGAAA ATAATAGTAT AGATTAGTTT TGGTCTCTAC TCATTTTGCC

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TTCTGATTAT ATTACAACCTC CAGCTGGTGA CAAGATGGCT GTGTAAATCT TGAAATCACT GAGCATTTCAT TTTAGCTTCT  
CATTGAAAGG TAGATAATCA GTATGAATTG TAAACTGGCA TTAAGGGAGA AAGTAGGNAT AATCAAACCTT GATCTGAGAA  
TTACTTGCTG GTGCATTTC TCAATGCATA GTAATATCCT TATGANGATG CAGATGCAAA AGTGGGTTTT GGAGGTGGAT  
AAGGAGGGCA GCT

SEQ ID NO:1086: (Length of Sequence = 277 Nucleotides)

TGGATAGCAT GAGGCAAATT GCCAGAAGAG AATTTCTTTC GCATCCTAGT AGAATAAATC CAAATTATCT TTGTGGTACT  
GAGGATGTCT GGTTTAGCAC AGTGTAAGT TGTAAACACTT TAACAGGCTA TTAATTCACA GTCACTAATT CAATGCTTGC  
CCGGAGTTTT GCTAGAAAAG GATGAGAAGG ATTAAGGTAA AAAAAAAAAA NAAAAAAAAA AAGATAAGGT TAACCAGATA  
CATCTTAAGA GCTGATTGCT CTTCAATCCC TAACTCG

SEQ ID NO:1087: (Length of Sequence = 360 Nucleotides)

TTTTTTTTTT TTTTTTTGAG ACATTGTCTC ACTGCGTGGC CCAGGCTGGA GTGCAGTGGT GCAATCTTGG CTCCTGCAA  
CCTCTAAATC CCAGGTTCAA GCGATCCTCT CACCTCAGCC TCCGGAGGGC NIGGGATTAC AGGTGTGAGC CACCGCGCCC  
GGCAGCATTA TTTTTTAAAG ATCTGTGATA GTGCATGTTG TGCTAGTTCT TTAATACAGA CTATATTGTA TTCCATGTCA  
GTTTTTAAAG TTTATTTCCC TATTGATGSC ATTTAATTCC AACTTTTAGA TAAAAGGATG TACTGGACAT TTTTATAATT  
TTTTTGGGGG ACCATGTAAG AGTTTTTCTA GGGGGAATTC

SEQ ID NO:1088: (Length of Sequence = 209 Nucleotides)

CTGGGACCAG CTGGAACAGA AGTGGTAAAG GATAACTAGC TACCTGCACC GCCAGAGATC AGGNTCAGGG TGAAGCTGGT  
TTCCCAGCAG GCGAAGTGAA GGAAGTGGT TNGAAAGGAA GAGGAGGAGC AGGAGATGGT AGGTCCCTCG CCTNCTCCC  
NINCTACCTT GGAA..NATAA GTGTCAAGTT CATACTTAAC CACCCCTT

SEQ ID NO:1089: (Length of Sequence = 409 Nucleotides)

TTTTGCTCAC AGCTACATCT TCAGAGGTGA GAACCATGCA TGACACAGAG AAGATGCTCA CTGATGGATT TAATGAGTCA  
AACATTGAAG AATCAATGAG TGCCGGAAAT AAACAGGATA GGTGGCAGCA TAGCATGCCC TTAAGANCAAT GGCTGTGGAT  
TCAAATCCCA GACCAATCAC TGANTTTCAA GCCACTTTGC CTCTCTGAGC CTCTGTTTTT TCATCTGTCA AGTGGCAATA  
ACAATAAATG GTACGTGCCT CATAGGGGCA CCTTGAGGAT TAAAAGAGAG GGTTTCAATA AATCAAGTAC TGATTTCAA  
ACCTGGCACA TAGTAGGCAC TCAGCACATG GNCCTTATAT ACTTNTGGGC CAGCAGCGGC TGGGGCTCAT CCTCCCTGG  
CTGGGTCCA

SEQ ID NO:1090: (Length of Sequence = 337 Nucleotides)

GAACCTNTCC CCATGGGAGA GGATGAGGAT GATGATCTGG ACCAGGAGAC AITCAGCATA TGTAAAGGAGA GGATGAGGCC  
CGTNAAAAAG GCACTGAAAC AGCTCGACAA ACCTGACAAG GGGCTCAACG TGCAAGANCA GCTGGAACAC ACCCGGAAT  
GCCTGCTGAA AATCGGAGAC CGGATAGCCG AGTGCCTTAA AGCCTACTCA GATCAGGAGC ACATCAAACCT CTGGAGGAGG  
AACCTATGGA TTTTGTGTTT CAAGTTTACA GAATTTAATG CTCGAAAACCT GCATAAGTTA TNCAGATGG CTCATAAGNA  
AAGGTCTCAA GAAGAAG

SEQ ID NO:1091: (Length of Sequence = 411 Nucleotides)

CCACTACCAC AGGAAATCTC TATACCCCTC TTGGCTTTTC CTTTTAATGT AATTTCTTAA AAAGCTTCAA GATAATTTTT  
AATCAGGCAT GCTGAAATCT ATCTAACCTA TTAGTCACTA ATTATATTCT TCAAGCCTAT ATATTAATGT TTCTNCTGTT  
GTAAATTCAT GATCATAAAG TTTTGGACCT GGCCATCAAT ACTAAAGCAC TGATATTTAG TTTTAGGTGA TACTTGGGCA

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TAAATACAAA CACGGGATAT ATTTNGTCAT AGAAAAAAT GTGTTACTGC ATTATTTTGC ACTTCTGAAG GACTGCAAAC  
 ATTTTTC AAG CACAATAAGC AAATTCTTCT TTCAAAAAGG NATACTTNG CACATATGTN AGGTTTGGAA AATGACTAGG  
 NCCCTAGGGA G

SEQ ID NO:1092: (Length of Sequence = 349 Nucleotides)

AAAGAAAATG CCTTGGGAAG ACAGATGCAT TTTTNCAC TGGTGTGCA ATTGCTCAAA TATTTINAGG ATGAATATCC  
 TCACCTTGGG GCGAAGTTTT TAAGAGTGAA TTTGAATTAC TGGAGCAGTG AACAAATTATT TAGAGTCTGG TATAAGTGAA  
 GAAAAGAATC ATGACCGTGA AGCTGTCTTG NAGGTACCAG CAACTGNCT CTAATAATTTA TATGGAAAGG CAAAGGGGTT  
 AGAATAGCCA ACATAATACT GNAGAAGTGT GAAGACTCAC ACTATCCAAT TTCAAGGTTT ACTGTAAAGC TACAGTAACC  
 AAGGCAATGT GGCCTGGTG AAAAAGTAA

SEQ ID NO:1093: (Length of Sequence = 400 Nucleotides)

GGACCTTGTT TTACATTCTG GATTTTCCTT TTTACTTTCC TAATGATGTA ATTTAACTNC TTCTGTATT TNCCATATTT  
 CCTATAAAT GGTAGTTAGA TCTAAAAGCT TGATTTACTT ATTTAGATT TCTAGTCAAG GGTACTCAAT AGATTGTATT  
 TCCTTTTGGC TCACACGGAG GTGCATAATG TCTGCCGTGGC CTGTAGTGAT GCTAAGGTTG ATCATTCTGT TCAGGTGGCA  
 TCAGTCTGTG ATAACCTTCT GTAAGAATCG TTCATTAAAC TTTTCTCTAA TGGNTCCATT CATTATGAT CTTTAACTGA  
 ATCCCTGTTA TTTTATTAGG GAATAGCAAA ATAATGATTT TCTAATTCTG TNATTCTTT CACATTTATT AACTGTAAAT

SEQ ID NO:1094: (Length of Sequence = 414 Nucleotides)

GTCAGINTTC CATAACTGTT TCCTGCTGAC AAAGGGGCAG TGGTATGGT TCTNTGGGTC TTGGCCTCTT GCTAGCTGTC  
 ACAGCAGGAG GGTGGCTTIN TGGATTGGTG AAAGTGGTAT CCAGCCAGGT CCAAGAGAGA CAGGGGCAGG GTTTTNC  
 TGCCAAATAT ACTTCAGCAG TAGAAGCCAC AAGATTACAT TATTAAATTG TCCAAGAGT CCCCAGTGC AAACCCAGC  
 TGAACGCCAT TTAGTTATAT NCTGGTGGT TTTCTTCTG CAGGAACTCA AACCAAGGTT TCTTATGTGT GCTTGAGTTG  
 GGGGCCAGAG TGACAACTGG TAGAAACTA TGTATTCC CAGCTANGAG AACAGAGGGG AGGGGTACAT GATAGTAGGG  
 AGTCAAGTTT ACAA

SEQ ID NO:1095: (Length of Sequence = 387 Nucleotides)

GATCTGGCAA CCAATTATGT AAATAGTCAT ATGAATCCTT CAGAATGGAT AACACAGCTT TNCTGACTGG TGTGAAATAG  
 TTTTCAGGIG CTCATTCTTT ACTTCATTAG CTTATCTTAT ATCATTAGCT TATCCTCCAT TCAGGTATTA CAGATCTTTT  
 TTTTCIGATA AATATGGCAG TTTAGGGAAA TAACTATGG CATAATATGC TAGGCCATTG TTCTAGGCCA CGCTTCTTTG  
 ATTGTAACTT TAAACCTTT ATCAGAACCT AAACAACCTT TCAAAAGATC TATACATATT TNNATCCAAT GTTTAAGGCT  
 ATGAGTAATT CATTATGGTC ACTCTTCATT TTNTTCACCT GATAATGATC TCGNCAAAA TGTGAG

SEQ ID NO:1096: (Length of Sequence = 416 Nucleotides)

AACTTAAAGC TTTAGAATGA TTGAGGTAGC TCAGAGCAAA AACCAAAAGG AAAGGTGATA TGTAGATGTC TGGGCACTCA  
 CATCATAGGT TTGGATAGCT AGTTTAGGAG TAAGTGAAAC ATTTTAGAAG AGCATTATG TTAACCTTGA CAATAGGATG  
 GGAGATTCTT AACCCCTTT GTAATATGCA CCGATTGATT CTNAGTTAA ATACACCACA GTGACAGTGA TATCATCCCT  
 GTACATCCTC GCCAAGTCT CTGGCAATGT CAGCATCGCC GNCAGCCGCT CTGCCTCCAT CTCCCATAC TCATTGTTC  
 CGATGGCATG TCTGATCAGC CGCGTGGCTG CATTTTGGTC AGCCTCGTGG AGCCCGCTGG CTTTCTCTG CAGCAGCAGG  
 CTCTGCAATG AGNCCC

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SEQ ID NO:1097: (Length of Sequence = 406 Nucleotides)

CTGACCTCGT GATCCGCCCA CCTCGGCTC CGAAATGCT GGGATTACAG GCGTGAACCA CTGCGCCCGG CATGATTGGC  
 ATTTTGGGCT AAATAGTTTC TGTCACAGG ACCGTCCTGT GCAGTGCAGG TCTTTTAGCA TCCTGGCCAC TCATAGTGCC  
 CGTGGTTCTC AGTAGAAGCT GTAGAGGATG TTGGGAAATT GGGGTGGGTT GGTACAGTGT CCTGGCATCT GTCTCAGGGT  
 AAGGGCTTNG GAGGCTCAAG TGCAGAGTCG TATCTGGATG CCAGCAACAC CCTGTTGAGA AACTTTCTAC TATGGTATGC  
 TCATCATTCT CTGAAGATGT CAGGGCCTGT TTGTTTGTTT GCCTGTTTCT CTCACTTTTG CCTTATAATC AGTTCTTCCT  
 TGTGGS

SEQ ID NO:1098: (Length of Sequence = 326 Nucleotides)

GGCCCGCCCG CCTCGGCCTC CCAAAGTGCT GGGATTACAG GCATGAGCCA CCGCGCCCGG CCATGTAACA ACTTTTATAA  
 AGTTATGATG TGATGAGTTT TGGTGTAAATG TTTTCCCTC CTCTACCTAA AACCCTTCAT GCCTTCCCAT TGCTCTAGA  
 AAACACTCCC CAATCTGAAA CATGACCAT TTTGTTTTN ACACCCAGAT TGCTCCAGAC TTGGTCAGTT GGTGTCCCTC  
 CAAGCTGGTG CTGGTGTCTT TCCGCAATC CCCTATTAGT TTTTGAGCAC CTGGACCAGT AAGGTGTTC GTCTCACTTT  
 GCACTT

SEQ ID NO:1099: (Length of Sequence = 342 Nucleotides)

GAACACGAAC AAGTTTCAGC AGTCTAGCCT TTGGATGACC TATTTGAAA CCAGTGAAAG TCGTGGAGGA ATGGGCAAGA  
 ACCACCTCAT GATTCTNCAG GCCATTGCTA ACGAACAGCT CATTGCTACA ACCAGTCCAG AGGTTTTATT CCCTCTACTC  
 CGAGCAATGA AATAGACCTG AGTTATGCTT CCTTCATIT AATTTCTGCA GATAAATAGT TTCTTGAGCA ATGGATGCTA  
 TCCTTGATA CCAGTCTCCA CTGTGCACGC CGGAACGCC TTGGGNCAC AGTTACAGAA AAAATGTAAA CTCAGAGTGA  
 TCCTTGATGA TATTGCTATA GA

SEQ ID NO:1100: (Length of Sequence = 301 Nucleotides)

ATGCTTGAG CCCAGGAGTT CGAGACCAGC CTGGGCAATG TGACAAAACC CAATCTCTAC AAAAAATACA AAAGANTTAG  
 TCAGGTATGG TGGCGCATGA CTGCAGTCTC AGCTACTTGG TAGGCTGAGG TAAAAGGNTC ACCTGAGCCC GGAAGTAGA  
 GGCACAGTGA GCCATCATG TGTGCCACTG GACTCCAGCA TAGGGAAGGG GACTGAGACC GTCTCAAAAA AATTAAATAG  
 AAAGTCTTCT TTTTAAAAA TNCGTCAATT CATGAGAAAA CTGCACTCAC ACATAGTGTG T

SEQ ID NO:1101: (Length of Sequence = 300 Nucleotides)

TTAAGTCAAA GGCTAGAAAT GATTAACTT AGTGAAGAAG ACATGTCAA AGCCGAGAGA GGCCAAAAGC TAGGCTCTT  
 ATGCCTAACA GTCAGAAATG CAAAAGNAAA ATTATTGAAG GAAATTAAAA GTGAAACAAC CTTATTGCTG ATATGCAGAC  
 AGTTTTAATA TTCTGGATGG AAGATCAAAC CAGCCACATT TCCTTAAGTC AAAGCCTAAT CCAGAACAAA ATCCTAACTC  
 TCTTCAATTC TTACGANGGC TGAGAGAGGT AAGGAAGTT CAGAAAAGTT TTGAACTAGC

SEQ ID NO:1102: (Length of Sequence = 174 Nucleotides)

GAGATCGAGA CCATCCTGGC TAACACGGTG AAACCCCTC TCTACTAAAA ATCCAAAAA ATTAGCCGGG CGTTGCGGCT  
 GCGCTTGTN GTCCCAAGTA CTCGGAGGC TGAGGCAGGA GAATAGCGTG AACCTGNGN GGCGGGNTG CAGTGAGCCC  
 GAGATCGGGC CACT

SEQ ID NO:1103: (Length of Sequence = 360 Nucleotides)

ACAAGGTCTT GCTATGTTGC CCAAGCTTGT CTCAAATCC TGGTCTCAAG CAATCCTTCT GCCCTGGCCC TCCCAAAGTT  
 CTGGGTATTA CAGGTGTGAG CCAGCACTCC TGGCCCATCA CAGTCTTAAA ACCAAAAGTT CTGTGTCCGA GGAAAACCA

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GAGTGATTGG TCACTCTATT TATGACTCAT AGCACTTACA GGCTACTTCG GCAGGGACTT NGGGTACCCC TGTTCCTGGA  
 TGGCACATCA TTATCAGCAA CAGGAACAGT TTCTCTGAGC CCTGGGCCCT GGAGAATCTC TAGCTTAGCT ATTTTAGACT  
 TGGGGTCAAA GAAGAGAGGC TCTTTGCCAA CTCAGCAACA

SEQ ID NO:1104: (Length of Sequence = 400 Nucleotides)

GGAAGCAAGA CAAAAAAGGA CAGAAAAGCT GGTITAGGTC TTCAGTATGT TTATTTGTCC CTCACATAGC GGCTTGATCT  
 GTCTGCCTGT GTGTTCACAT AGTTAACCAG AAACGCTAGG AGGAAGTGT ACCAGTGGGA TACCTCCTTA GGTGCCAAG  
 TTTTATTTTG AGAAATAATA TTACTTTCCT CTTCTGAAAT AAAATAATAA TAATANGANT GAAACCCCCA AACCACAGTG  
 TGAGTCTCAG GTTAGCATTT GAAAACATCT CCAGAGACAT TGTATTCTCT CAGGAGGTTT CCTTGACTCC TTAAATGTGG  
 CTGATGTTTC ATGTTAATT TATTTANTTT TAATAAGGTA TGAGCAATCG AAGGGGCTGA TCATCTGAGG TTTTGTAACCT

SEQ ID NO:1105: (Length of Sequence = 380 Nucleotides)

CCAGTGCAG AGGGTGACCA AGCCTGGGAA GGCCCCAGGG GTCCAAACACC AAAATTAAAG GTTTATTATA CACAAGAGGA  
 CGTCTGTCC CTCANAGTGG CTGGCCACCC TCCCCACTCT GGCCAAGGTC CTGCACAGAG GTTGTCTC AAGGGTGACC  
 CTCTTGGCC GCCACAGCT AGACCTCCGG CGGAGAGGCA CGCAGTCCAT GCTGCTGGCA CAAGTCATT GNCAGCTNC  
 TCAGCCACCG NMTTGGCATC TTGTCTTNA GGTAGGCGCC TTINTTGCCA TTCAGACTTG AGTTCCAGCC ACTCATAGAA  
 TGGGACGTCC ACTATCAGGA AGNCTGCAGC CACTTATGTG TCGCGGGGCC AGAACAAAGG

SEQ ID NO:1106: (Length of Sequence = 334 Nucleotides)

TGTATCTINTT TGANTTCTAA ACCCTTGCTT TTCCCACTGC AAATGTTTT GGCTAGAGAG CAGGCTATTA AGACATTCTA  
 GCCAAGCCAA TTTCTTGAGA GTNCTGCAGG TACCAGGTGT TGCTGGAGCC CAGCATCTGC TCAGAGGAAG GCAGAGAGAC  
 CCAGAGGAAC CCAGAATGAG ACACTCATTT TTGCATCCTC AGTTTCCAAA TTAATTTTNT AGCTCCTGGT TAGGACCCGA  
 NMTNCAGAGA CCAGGCAGCT NTCCAACAAG AATGCTGACA GGTTCATTG TCCTCTAGGG TAGCTGCTGN CTAAAGAATA  
 TTTGATTTTT TGGG

SEQ ID NO:1107: (Length of Sequence = 346 Nucleotides)

CTCACTTTAG TTTGAGTCAA TATCTGAGAA AAAAGAATG GAGTAAAGC ACAGAAAGCA AAACCTAGCT TAGAAAATAT  
 TTCCTAATTC AAAAAATGAA CAAGTCAGAT TCTGTAAAGA TATCCAGTGA AATCTTGAAG AAATATTGTA TTGATTATTA  
 ATTAANCTGA TTGGAAAGTG ATCTTGGGTT CACAATGAGG TTGTTGAACA AGTAGCATTT TCATACAAAT GCAAACCAAT  
 TCAATGTTTT TNCATACACT GTTACATTT CTTTNCAAAA TTTGATTTCT TCTTCGTGAT CCTAGTCAAA TTCTGCCCTC  
 TCAGTAAATC TTTATCAAGT TTGCAG

SEQ ID NO:1108: (Length of Sequence = 410 Nucleotides)

TCCTGGCGAC GTGGTCCCGG TAGGAGACTT AGACCTGAGC TGGATCTGTT GACCCCAAAT TGTGCTTTTC CCACCAAGAA  
 GAAAGACAGG GAGAGAAACA TTAGTACAAG TNCIGAAGTA AAATATAGCA GAGAAGAAAC ATAATCTCTG AAATCACACA  
 GCTATTCGGT TTCAAAGCGT TCCTAGCGCC CAGCTCTCCT AACTCCTGGC CAGTGTCTT GACATTATGG TAATACATAA  
 AGACTTTGTT TCCGCTGGTG TGTGCTGTG GGAAGCCTCT GACTCACCTC CGTGCTCCAG TAGCACCTTG TGCAAGCCTT  
 CCAATGTCGN CCTTATTGCG TGGCGCGGAA GATAATAGTT TGGATTNCTC TGCAAGTCAG ATAATAGCTG TATCCACTTA  
 CTTGGCACAT

SEQ ID NO:1109: (Length of Sequence = 352 Nucleotides)

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CGCTCGINTG TOCCACACAA ATGTTTAAGA AGTCACTGCA ATGTACTCCC CGGCTCTGAT GAAAAGAAGC CCCTGGCACA  
 AAAGATTCCA GTGCCCTGA AGAGGCTCCC TTCCTCTGT GGGCTCTCCT AGAAAACCAG CGGGACGGCC TCCCTGCTGA  
 TACCGTCTAT AACCTTAGGG GCCCTCGGG CAGGCAAACT CATCTCGGTG ATGGCTGTAG ATGCTAACAC TGGCCAATTC  
 AATGNCACAN CTA CTACTGGTTA CCCCTTTTGA GGGGCATTTT TCCAGACAGA AGGCCCTTG AAGCCTAGGT AGGGCAGNT  
 CAGAGATACA CCCGINTTTG TCTCGAAGGC TT

SEQ ID NO:1110: (Length of Sequence = 218 Nucleotides)

GTITTTTTC TTTATNNCT CCCATAAAA CAGTATGTAC AAGGTTTGA TTCAGGGGAG AGAAAGGATA TATGAAGACA  
 CATTCCTCCC TCTTCTATT TCTTACCTGG TTAGAAATAA ATAGGCATAT AGTCNGTTT ATTATGGGCA GGAAGGTAGG  
 TAAAGATCAC CTAAGTNCCT ATGGCGTGT GGCCTTGGCA CATGGAGAAT GAGTTTTT

SEQ ID NO:1111: (Length of Sequence = 211 Nucleotides)

TTTGCTTTAT GAAGAAGCTG GCCTAGGTAG GGTACAAAT GGGTTTACT GAACITAAAC AGCTAATTGC TACATCTCTG  
 AAAATAATCA GAATAGAAAA ATAGATGGAA AAATTTCAAA CCCACTGTAA GAGACTAACA TAAATCCAAT TCCAAAAGCT  
 GTTAATCATA CCATCTAAAA AGAAACTGT CGACTAATCA TGTGTTTACA A

SEQ ID NO:1112: (Length of Sequence = 360 Nucleotides)

CCCTATAATA GTCCCGTGAA TAGGGCTAGC AGTGGGATTT TTGTGTTATA GCGAGGAAA TAAACACTCC TTTTGCTGAG  
 ACTAAAGAGC CAGGTGGGG TCTCTGGACA CATAGTGCAA TCAAGGGAGG CTTAAGACAG CAGAGGCCCT CAGAGAAGAC  
 GTTCATTCTC CCAGCTACTT GCTAAGCAGG TNCCTGTGA TCTGGGCAGT CCTGGGCACA CCAGTGGTGA AAATACATGG  
 TCCTGCCTGC CTGCCGAG CTTCTATTTT CCINATGGGA GAATGCTGCT CCATTTTGT ATTGGAGGAA CTTTTTGCAA  
 GCAAAGCCTN TTTGGGAAA AATGGCGGC TAGAAACCTG

SEQ ID NO:1113: (Length of Sequence = 448 Nucleotides)

GCGGTA CTG CGTTAGTGAT TAGAGTTTTT NCCCTGCCG AGGTGGGATA CACGGTAGCA TCATGGTCGA GGAGGTACAG  
 AAACATTCTG TACACACCT TGTNTTCAGG TCGTTGAAGA GGACCCATGA CATGTTTGTA GCTGATAATG GAAACCTGT  
 GCCTTTAGAT GAAGAGAGTC ACAAACGAAA AATGGCAATC AAGCTTCGTA ATGAGTATGG TCCTGINTG CATATGCCTA  
 CTTCAAAAGA AAATCTTAA GAGAAGGGTC CTCAGANTGC AACGGGATTC ATATGTTTAT AAACAGTACC CTGCCAATCA  
 AGGACAAGAA GTTGAATACT TTGTGGCAGG TACACATCCA TACCCACCAG GACCTGGGT TNNTTTGGAC AGCAGATACT  
 AAGTTCCNGA GGATGCCAG TGATCAGNTG CACAGTCTA GCGGTGGC

SEQ ID NO:1114: (Length of Sequence = 268 Nucleotides)

GGCGGCCAGG TGGTGCCATG NTCTINTG TN CTGTGCGTCG GCGATGTGG TCATCAGCCT GAGACCCAGA TAGGCTGAAC  
 CCCGACTGAT GTAGGTGCG CACAGGAGG ACGGAGATCT TGCTGGGCA GGACGCGCG GCGGAGCGC CACTCCCTGG  
 CTTGGCAGGC ACCATCACT CTGTGACGGG CCCGTAATAC AGCCACGGG GCACACCGTG GNTCTNCGN CAGCCTGTTG  
 CGAGCTTTGA TCCTCTGTGA GACAAAGT

SEQ ID NO:1115: (Length of Sequence = 342 Nucleotides)

ATCAGTGCT TCTTCAGCTC TATCTGGGAC ACCATCTTGA CCAAACACCA AGAAGGCATC TACAACACCA TCTGCCTGNN  
 AGTCTCTCTG GGCCTGCCAC TCTTGGTGAT CATCACTC CTCTTCATCT GTTGCCATTG CTGCTGGAGC CCACCAGGCA  
 AGAGGGGCCA GCAGCCAGAG AAGAAAAAGA AGAAGAAGAA GAAGAAGGAT GAAGAAGACC TCTGTTCTC TGCTCAACCC

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AAGCTTTCTC CAGATGGAGA AGAGACCATC ACTGCCTGTT TAGTAGGCA GGAANGCAGA GGTGTTTCTT TTCTGGGGCT  
AAAGNCTCCT TCTGACCACA CA

SEQ ID NO:1116: (Length of Sequence = 416 Nucleotides)

CACCTTTGGG AGGTAGGGAT CATAGTTCCA CTTCAATTGAT GAGGAAACT GTAGTGCAGA GATGGCATACT ACTGTCCAAG  
AACATGGTGG TGGATGGAAC CCAAACCCCA ACTTTTGCTC CCATGINCTC TGTCCACTGG CTATGGCTCT TGGCCCTGTG  
TACAGATACA GGCTCTGGAC AAGTTCACCA AATCCCTTAG GCTTCAGCCC CCTCATCTGC AGAATAGTGG CTTGGATTCC  
ACCATCTTCA AGGTCCCTGC CAGCTTINAT TTATTTAAAT TTGGATTAT TAAGCAGGAA AAAAAGTAAT GGGAGTTTGT  
GGGTACCAAT GGATTAAAGG GGGTNAATC TGGNGGCTNG TGAGTAAAT TAGGGTCCCC AAATGG

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AAGGACCGGG ATTCTGATGA AGCGTGTIT CTCACTGCCT GAAGTTTCCC TTTGGAGTTC CAAAGTAAAG GACACATAAG  
CAACACTTCC AAAACAAGG GAACAAGGTG GTTTATTGTA AAAACAGGAA ATGGTGCATG TCATTGAGAA CTATTTTAAAT  
GCAGCTATGA AAAGGGAAAA AAGTGCCAG TTCTTGATTT CTTAGATACT GAAGAGGACG TAGCATTTCA TTTATCAAAT  
ATAAGGAAAA TTATTCACCA TTTTGAAGCT CACCTTAGAC TATGAAAT ATATTCACCTG CAGAGCAATT ACTTCTGTCA  
TTACCTGAAG TGATCAGTAT CTATCTCCT TGTATAGCA TGCATCTCTC AAAAAGGCCT CCACTCCTTT CCTCACATC  
TGTTGTCATC ATGATT

SEQ ID NO:1118: (Length of Sequence = 379 Nucleotides)

GACAGCAGCG TGTCCAGGGC GGCTGTGGAG GTGTTCGGGA AGCTGAAGGA CCTAAACTGC CCTTCTCTCG AGGGTCTGTA  
TATCACAGAG CCAAAGACAA TTCAGGAAGT GCTGTGCAGC CCTCAGAGT ACCGCTTGGA GATCCTAGAG TGGATGTGTA  
CCCGGGTCTG GCCCTCACTG CAGGACAGGT TCAGCTCACT GAAAGGGGTC CCAACAGAGG TGAAGATCCA AGAAATGACG  
AAGCTGGGCC ACGAGCTGAT GCTGTGTGCG CCAGATGACC AGGAGCTCCT CAAGGGCTGT GCCTGCGGCC CAGAAGCAAG  
CTACACTTCA TGGACCAGTT GCTCGATACC ATCCGGAGGC CTGACCATTG GGTGCTCCA

SEQ ID NO:1119: (Length of Sequence = 233 Nucleotides)

CAATATTCAA GAGTCITAT TGAAGACTTG AGATGGGACT TCCAACTCAG AGGATGTGGG AATCCCAGCT CAAATGATAC  
AGGATAAACT GGGATGGGCT AGGATGGACA GGCTGTGGAT ATGGGAGTCA TGGGTCAAAG TCTTATCCCA GATGGCTCCA  
GGTACAGTGG GCTTCTGGG CTGGAAGCTG GTTCTCCCC ACTTCATTCT GCTCAAAGCT TCTTGAAGGA GCT

SEQ ID NO:1120: (Length of Sequence = 325 Nucleotides)

GAAAAACAA CCATACCCTT NCTTTTGAGG AAAACTTACA AACTTTTATA AGAATAAACA TGAATCTNCT TAGAAAGTTC  
CAAGATAACA TACACAAGT ANTCACCTCT TCATATATAG GCACCACACA CATAAAGATG TAGCCTAAAT CACAATCACT  
TCTCACCAGG GATGGAGATA GGAATTTACA TTCTTGACTT CATTAACTCT CTAATTGGC AAAAACCTCC AAGCCTTTTA  
TACACATGCT GCGTGTAGGC CAGATCTCAC TCATTCTTAT AATTGTGCAA ATAATATGGA GACCAAAAGG GCAGGGTTTT  
CATTT

SEQ ID NO:1121: (Length of Sequence = 161 Nucleotides)

ATTAGTATTT TTGTCTGTAT GTCCTAGCAC TGTTCAACAA CAAATTTTNC TAGTCTTGT TAATTTTINAT TTGTTATACA  
ATGGAAGCAC AATGTTATAA GGAAAGGTAA TTTTAAGCTA ACAACCAGTG CACAGCCTCA GGTTTTAAAT TACAACCACA  
G

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SEQ ID NO:1122: (Length of Sequence = 181 Nucleotides)

CATCTTTTTC CATCAAAGTA CTACCAAGTA AAGAATTAA AAATTACTTG TCTAGTCATG ATATATTTTC CTNCTGCTGC  
TGAAAAATCC CTGCTTATT ATTCATGTA CCTTTATCAT TCATTTGATG AACTGACAG CAACTGCTG AACAAAGTTA  
AGAATAGCTG ATATTTACTG A

SEQ ID NO:1123: (Length of Sequence = 174 Nucleotides)

CCCTAGAGTT AAATTCACC CATGAAACAT CAGCCACATG TCATATCAAT TCAAGTGTGT AACATTGATA TAATCGGGTA  
CACCACAGCA GCACTGACAG AACAGAAAT GATTCAGAGA AAGCCAATTA AAACAGCCAG GGGATAAAGC AGATCTGTAT  
GACATTAGCT TTTT

SEQ ID NO:1124: (Length of Sequence = 232 Nucleotides)

CTTTTAGCAG AGACGGGGT TCACCATGTT GGCCAGGATG GTCTCTTGAC CTGTGATCC ACCCGCCTCG GCCTCTCCAA  
GTGCTGAGAT TACAGGCATG AGCCACCGCG CCTGGCCCGAG GGAAGGCATT TTINAAGAAA TAATAGTTGA ATTGAGATCT  
GATAAAAGAA GTAGGAGCAA AATNGGGGGG GTGCAGTTT CCAAGAAGAG AAGACAGTAC ATATAAAGGG CT

SEQ ID NO:1125: (Length of Sequence = 233 Nucleotides)

GATACTATGG GTTCAGTGAC ATAGAGACAC AATTGAATTA GCAATGAGCT TCACTCAGGA GCCAGAGAAT GGGTTTNT  
CTAAGAGATG TTTTAAGTAA CATTTAAATG GCACTGCTGA TTGATACCAG CATCAGGAAG CTGAGGACAA GAGCTCTCTG  
AGAAGGAAGT TGCCATATTA CAGAAGTGAG GTGACCAAGC ACTTNTTGTG GGTCTGTACA TTTAGACATT AAT

SEQ ID NO:1126: (Length of Sequence = 258 Nucleotides)

TTTTTTTTTT TCCTAGGGGC CGCAGACGG CTAATTTATT ATAATTCCTC CGCCGAGTT GCCCTCTGGC GCCAAGCGC  
AGAACGGAGC GCCCGGGATG CAGGAGGAGA GCCTGCAGGG CTCTCTGGGT AGAACTGCAC TTCAGCAATA ATGGGAACGG  
GGGCAGCGTT CCAGCCTCGG TTTCTATTTA TAATGGAGAC ATGGAAGAAA TACTGCTGGA CGCACAGCAT GAGTCTGGAC  
GGATTAGCTC CAAGAGCTCT CACT

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GTGTGAATAG GCAAGCACTT TGTGTGTGT ACTAAGGAAC TCAAAATGAT AGGCTTTTTG TCACCATGTG CTTCCAGGNT  
CTCTGTTGCA TGAGCAGAGA TAGAGGATCT TGACAAACA ATTAAATGCT CTAGCCATAA GTAGTGCAAG TTTCCTTTGC  
TTGAAATTTA CTGCTGATAG CCCTTGATG ACACCTTACT TCCAGAGGCT AGGAAGTACA GTTTTCCAC AGTCTAAGAA  
TGAAAGAGNA TTAACACAG TAATGCATAG CACTCATACC ATGGATGACT GGATAATTTT AAAAGAATGG GAATATGCAA  
G

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ACAGCTCAAT GACTTATCAC AAAGCAAAGC CCCAAGAAGT CACCACCCAG CTCCAGAAAT AACACATTGA AAAGCTAGAA  
AAATCTCAAA TTGACATCCT AACACCACAA CTAAAGGNTC TAGAGAACCA AGAGTAAACA AACCACAAAG CTAGCAGAAG  
ACAAGAAATA ACCAAGCTCA GAGCAGAACT GAAGGCAATA AAGACACAAA AAACCTTTAA AAATAGTCAA TGAATCCAGG  
AGCTGTTTTT TTGAAAAA

SEQ ID NO:1129: (Length of Sequence = 163 Nucleotides)



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CAGTGGTACA GCAGCAGCAG ACACGCATCG CAGAGCTGGA GAAGACGTCA GCTGAACACA AACACCAGCT GGCGGAGAGA  
AGCAAGACAT CCANCTGCTA AAGGCATACA TGCATGCAAT CCGCAGTGTG AACCCCAACC TTCAGAACCT GGAGGAGACA  
ATT

SEQ ID NO:1130: (Length of Sequence = 382 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTACTGT TCAAACAGCA ATGTTTAGTT GTACAACACA TAAAGTCTAG  
CAACAATTAC AGGNCAGTT TGAGTGTCTG TTGCTTGT TTCAATTGGG AAATTAACT GTAATGTCAC CGTAAGATTG  
GCTGGGACTG GTAACATTTA AGAAACGGGT TGINCTTGCA TCCCCTAGGC GTGGGCTCT TGCTCCATCA GGACTTGGTT  
GTAGATGAAT GGCCACAAG TCACCAGCCT TTGAGCAAGT TGTGTCCAGG TGGAGACAGG AAGAGGGTGG GCAAAGGGGA  
ATTCTATAAA GACACAGTGT NTGGGGCAGT GGCAGTCAAC ATTCGCAAAC ATTCATGCAT CT

SEQ ID NO:1131: (Length of Sequence = 406 Nucleotides)

ATGCTAATTC AGGCTCCACA GATAGTNCIG GTGATGGGGT TACATTCCA TTAAACCAG AATCCTGGAA GCCTACTGAT  
ACTGAAGGTA AGAAGCAGTA TGACAGGGAG TTTCTNCTGG ACTTCCAGTT CATGCCTGCC TGTATACAAA AACCAGAGGG  
CCTGCCTCCT ATCAGTNCIG TGGTCTTGA CAAGATCAAC CAACCCAAAT TGCCAATGCG AACTCTGGNT CCTCGAATTT  
TGCTTCGAGG ACCAGACTTT ACACCAGCCT TTNCTGATTT TGGAGGCAG ACACCTGGTG GAAGAGGCGT ACCTTTTTTG  
AATGTTGGGT CACGAAGATC TCAACCTGEN CAAAGAAGAG AACCAGAAA GATCATCACA GTTCTGTAAA AGAAGGTGTA  
CACCTG

SEQ ID NO:1132: (Length of Sequence = 400 Nucleotides)

ATTTTGGTT ACTTCAGGCA GGAGGGTAGA CATAGCACTT ATCTGGATTG GATGTAGCCA CAGGATTAGA ATTGTTGGGT  
CATAAAATAT GTACATGTTT AGCTTTAGTA GATCTTGCTT AGAGTTTAAA AAATTAAAAA TTAAATATTT TTTTAAATTA  
CAATAAATTC AGCTAATTTT AATTTTAGAT AATTTTATA ATGTAGTTGA TCTTGGTTTT AACCAGAGCA TGTNGCTGGA  
TTTINCTCCC CAATCGAACA CAGTAGAGAG AGAAGGTGGC GGGTCTTAG TGATACCATG CACTTTTTTT TAGAACTTCA  
GTGCTGTATC CCTTCATTTA CAATGTATGA TGAAAAATAC TAAAGAAGGG ATNGTGGTGG TGGTGAGGGA GGCAGGAGAG

SEQ ID NO:1133: (Length of Sequence = 347 Nucleotides)

CCCAGGGCGC GCCATCCATG GACGAGCTCA TCCAGCAGAG CCAGTGAAC CTCCAGCAGC AGGAGCAGCA CTGCTGGCG  
CTCAGACAGG AGCAAGTGAC AGCGGCCGTG GCCACGCGG TGGAGCAGCA GATGCAGAAG CTTCTGGAGG AGACCCAGCT  
AGACATGAAC GATTTTAACA ACCTCCTGCA GCCATCATC GACACGTGCA CCAAGGACGC CATCTCGGCC GGAAGAAGT  
GGNTGTTTCA CAATGCCAAG TCCCGCCGC ACTGTGAGCT GATGGCCGGN CACCTCCGGA ACCGCATCAC GGCINATGGG  
GGCACACTTC GAGCTGCGGC TGCACCT

SEQ ID NO:1134: (Length of Sequence = 389 Nucleotides)

GGTCCAGGCC TGCAAGACTT GCCTAGTGAG AAGATATAGG AATGGGAACC CAGGTAACAG TCTGGCCACT TTNCCATAGG  
GCTGCTGCAG TATGCCCAGG GCCCGCTCCA GTCTCTAGTA GCCTCANATT TTCCAGTACC TGGAGTTATC ATCAGTGAAG  
CCTGTGAAAC AGCAAAGATG GCAGCCTACC GCTCCCTTTG GAAGCTTTGC CCTAGGGAGG TATGAATGAN CTINTTGCTG  
GCCCAAACAC ACCTGTAGGA GGTGGCTINGA GACCCAGTT TGGAGGTTTT GCCCAGTGAG GAGGAATGGC ATTGGGAAAG  
TGCTTAAAAA AGCAGTCTGG GCCTCATTTT TATAGAGCAG CTGTGCTAAT GCTGAGGGGT CCACAATCA

SEQ ID NO:1135: (Length of Sequence = 402 Nucleotides)

GCAGAGGCTT AAAGAGTGCT TATTCACGTA GGCTTGCCCT TNCCTACTCC TCCTGGGAA CCATTGTCG AACAAAGTGAA  
GAAACCTAGG CCAGCCTTCT TGAAGATGAG GGACCAACGG AGAGAGAGGC TCTGCTGTCC TAGCCCTCCC ACAGAATAAG  
TAAGCCTAGC CAACACCAGG TGGAGCAGAG ATGAACCATC TCAGTTGAGC CCAGCCCAA TTGCTGACCA AAAGAATTGG  
GAACAAATAA ATAATTATTG TTTTAAGCTA CTGTGTTTCT GGGTGGTTTT GTATATAATA GTAGCTACCT GATACATTGG  
GATGACCCCA ATTACTTGAA CTCTCTTAG GCCTGTTTTA TCACGTGCAA ATAGGGGATA ATTTTAGTAA TTTNGGGTGG  
CT

SEQ ID NO:1136: (Length of Sequence = 381 Nucleotides)

CAGGTGOGAG CCACCACGCC CAACCCAGAA CTCTTTTTAT TTTGCAAAT TGAAATTCTA CCCATTAAAT AGCAACTCTN  
CTTTCCCTT CTCCCCAAG CCCTTGSCAA CTGCTTTTCC ATTTCTATGA CAATCTCTAC TCTAGATACC TCATAGAGGG  
TGAATCATAC AGTATTTGTC CTTTTATGAC TGGCTTATTT CACTTAGCTG CTATATTATT AATACCAGCT TTCTGGGGAT  
ATAATTCACA AACTGCAGAA TTGAATGGTT TTNAGTCTAT TCACATCGGA TATGTTTTTG AAGAGACAGT AAAACCAATC  
CTTTTTCTCT TAGGTTCTCA GACACACACA TGCTTCTTTA TCTGGCAAGT CCCGTTATAA A

SEQ ID NO:1137: (Length of Sequence = 325 Nucleotides)

TATTTTTTGT ATAGACAGGG TCTTGTTATG TTGCCCGAC TGGTCTCGAA CCCCTAGTCT CAAGCCATCC CCCTGCCCTTG  
GCCTTCCATT CCTCTACTTT ATACCACGGT TATTCACCAA GCTTGCTTTT GTTCAGTGTA CTTCCTCATG GAAAAACTGA  
GGTGATATTT ACCCTGGTTT TTCTACCAGT GTGTAAGTGT CGCTAGTACC AGCTCAAAAA ATAAGAAATG AATAAATGAG  
TGATGACTAT CACTATGTTG CTCAGGCTGG ACTTGAACCC CTGGGTCCCA GTGATCCTCC CGCCTCAGCC TTCCAAGTAG  
CTGGG

SEQ ID NO:1138: (Length of Sequence = 422 Nucleotides)

CAACACACAT TAGCCTTAAC AACAAAGAGC TAATCTTATG TAAAGAACTC TTACAATTCA GAAAGAAAAA GATCCTAGTG  
AAAAATGTTG CAAGAGATAG CAAAAACCA GCCATATGAT AATAATAGTC AATAAGTGAA TCTGAATGAT GTTATCINCT  
TTTGTCATTT TAGAAATACA AATAAAATG ATGATGAATG CNCTTGCTTA CTAAATTAGC AAAANCTGGG AAAAGATGAT  
GATATTCAGG GTCAGATAAA GGGAAAAGGG TGCCCTTCTA TTGCAGTTTG GAAAGTAAAT TGGCACTGAC TTTTAGTGGG  
GATAGTCTTG TAATATGGGT CAAANGTCTT CAAATCGTGT CCACATTTTG GGGCCTGCAA TTCCACTTCT AGGGATTTAT  
TCTAAGGAAG TACCTAAAAA AT

SEQ ID NO:1139: (Length of Sequence = 367 Nucleotides)

ATACGAGAA GCATGCAAGC GGTGGCTCCA CCGTCCACAT CCATCCCCAA GCTGCTCCTG TTGTCTGCAG ACACGTTTTG  
GATACACTCA TTCAATTGGC CAAGGTATTT CCCAGCCACT TCACACAGCA GCGGACCAA GAAACAAACT GTGAGAGTNA  
TCGGGAAAGG GGCAATAAGG CCTGTAGCCC ATGCTCCTCA CAGTCTCCA GCAGTGGCAT TTGCACAGAC TTCTGGGACT  
TATTGGTAAA ACTGGACAAC ATGANTGTNA GCCGAAAGG CAAAGAACTC CGTGGGAAGTC AGTGCCAGTG ANCGCTGGC  
GGTGAGGGG TAAACCTTTT NCATACAGCC TTCGAGGCCT CTCCACT

SEQ ID NO:1140: (Length of Sequence = 412 Nucleotides)

ATCCAAAGGA TATAGGCAAG CATCAGATAC AGCCAAAGCA TTCTTTTCTT AAAAGAGTCT GAACGCATCT NATGCAACAC  
CCAAAAGTAT CCTTTTNTCT CTCGTTACAG TATGTTTTGG CTTTGGAAATA AATGATTAGT TATTGAACAA TATATGGAGA  
AATATCTTAC AAAAGGAAGT CATTTCATT TTCTAACATC TTTTACATTG CACTAATTAC ATGGTTTAAA TGACTATCCC  
TAATCTTCAT CCAACTACAC CCCATGAATT TNAGGTTTAT TTAATCAACC TAGTTAGACC AGATATATCC TTCTAAAATC

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ATTTGTAGAT AGAGGATTCT CCTTTTGTCT AGTAAATACC ATTAACATAT TINCAGANGG CCTGGTCTAG GGTCAATTAT  
TCCAGGGCCT CT

SEQ ID NO:1141: (Length of Sequence = 410 Nucleotides)

GTTAACCTGT GGCGCGCTCC GGGTATCOGG CGCCTGANGT TTTAGCTGCG GTGGCGGCGG CAGTCGGGAC CGACTNAAGA  
TGTCATTTGT CAGAGTGAAC CGCTGTGGTC CCGANTTGG TGTAAGAAAG ACACCGAAAG TAAAGAAGAA GAAACTTCA  
GTGAAACAAG AATGGGATAA TACCGTGAAT GATCTAACCG TTCATCGGGC AACTCCTGAA GATCTGGTAC GCGTCATGA  
AATACACAAA TCGAAGAATA GAGCATTAGT AACTTGGGAA CTCCAAGAAA AAGCTTTGAA GAGAAAATGG AGGAAGCAGA  
AACCAGNAAC TTAAATCTT GAGAAAAGAA GATTNGTCTA TCATGAAGGA GGNITCTTTC TGATCAATAC CAGATGCAAA  
GATGTGTTGG

SEQ ID NO:1142: (Length of Sequence = 392 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTCNNGG ATTGAATGTC TTTATTAAT AAACGAGTAA ATGGTAGCAC AAATCACCAT  
CAATATTTTT GGAAGGATTG GGGACAAGAT GTCAGTCAG AATATAATTN TCCATTTTCA GGTCTCAATG TAGCTGAAGA  
ACTGTGCCCA CTGATCAGTA TTACGTATTG CAAATGCAGG AGGTAAGGCT AAAATAGGAC TTATGCCGTT CAGAAGATTG  
ANTTTGAAAC CTTAAAACT ATCATAATAG TAGGAATGCA TGTTAAGATT TGATAACTTT CTTTAGCTAG AGTTTTCAAC  
CCACAGTTAG GAGCAAGTT GTAAAGTGAG TAGGINTGAA GAAGGGACAC TCTTTTGAGA AAAGAAATTN GC

SEQ ID NO:1143: (Length of Sequence = 200 Nucleotides)

ACTTCCTCTC TCCTGGCATC TGCTATAAAA ATAAGAAGGA GCAAATATTC TTGCCTCTTT TTATCACTG ANCTGAAAC  
CCATTGTIAC TGCCATGAAA ATAAGCACTG GTCCATGAGA CCAATGCCCA GAAAATTCAG GCTAAGATTC CTGGAAAGTG  
GGCTGTGGGC ATTATTTAAA ACACACACAC AAAATTTACC

SEQ ID NO:1144: (Length of Sequence = 333 Nucleotides)

AACAGAAGCA TGTTATTCA TTCCATTCC CAGAAAGGGA GTTAATGAAG ATAAAAATTT ATTTTAAAG GTCTTTATTG  
AGAGAACTT TGTTTTCTGA TATGAATAT TGCAATGTT TTTATAATA CTTTCATTAA AATGATGTA ACAGTAGTAC  
CCAACACTGT AAATCAGTG AAAATAGTAA ATGATTCTTT TATTACTAAG ACTGTCATGC ATTCTGAAGC AGTTGGCTTT  
TTTTTAACCA TAGGAAGTCA TTCCCTCTA GTCCTTCCC TTCTACTCTC CTGCTCAGAC CATTAGTAGG TACTTTGTTA  
AATAAAAAAC TAG

SEQ ID NO:1145: (Length of Sequence = 225 Nucleotides)

TGGGTTTCTG ATCCGAGAAA AATTGAAAGA CAAACATGGC TGGGGGAAGC AAAACGCTGA CACACAATTC AGGTGGCCCA  
GCACTGCTGA CCTGCAATCC ACCCCACCCC AAGGCAGCCC TTTCAATCCA AAGTGGACAG AGTGGGCCCTT ATCCAGANT  
CACTCAGGAA GCTTCTTCAA ACATATGACT GCCACACCCG CCCCCAAGGT TCAGAAACAT CTTCC

SEQ ID NO:1146: (Length of Sequence = 223 Nucleotides)

AAGGNACAAT ATTATICTAA ATAATTTAGA TTTGGAAGAC ATCAATGACT TTGGAGATGA TGGGTCCTTG TATATTACTA  
AGGTIACCAC AACTCAGNT GGCAATTACA CCTGCTATGC AGATGGCTAT NAACAAGNCT ATCAGACTCA CATCTNCCAA  
GTGAATGTCC CTCCAGTCAT CCGGGTGTAT CCAGAGAGTC AGGCTAGAGA GCCTGGGGTA ACT

SEQ ID NO:1147: (Length of Sequence = 389 Nucleotides)

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ATTTCACTGG CCATTAAGAC CCTGAAAGTT GGCTACACAG AAAAGCAGAG GAGAGACTTC CTGGGAGAAG CAAGCATTAT  
 GGGACAGTTT GACCACCCCA ATATCATTCG ACTGGAAGGA GTTGTACCA AAAGTAAGCC AGTTATGATT GTNACAGAAT  
 ACATGGAGAA TGGTTCCTTG GATAGTTTCC TACGTAAACA CGATGCCAG TTTACTGTCA TTCAGCTAGT GGGGATGCTT  
 CGAGGGATAG CATCTGGCAT GAAGTACCTG TCAGACATGG GCTATGTTCA CCGAGACCTC GCTGCTCGGA ACATCTTGAT  
 CAACAGTAAC TTGGTGTGTA AGGTTTCTAA TTTCGGACTT TCGGTGTCC TGGAGGATGA CCCAGAAGC

SEQ ID NO:1148: (Length of Sequence = 386 Nucleotides)

ATTAAATTGCT TGCCATCATG AGCAGAAGCA AGCGTGACAA CAATTTTINAT AGTGTAGAGA TTGGAGATTC TACATTCACA  
 GTCTGAAAC GNTATCAGAA TTTAAACCT ATAGGCTCAG GAGCTCAAGG AATAGTATGC GCAGTTINATG ATGCCATTCT  
 TGAAAGAAAT GTTGCAATCA AGAAGCTAAG CCGACCATTT CAGAATCAGA CTCATGCCAA GCGGGCCTAC AGAGAGCTAG  
 TTCTTATGAA ATGINTTAAT CACAAAATA TAATTGGCCT TTTGAATGTT TTCACACCAC AGAAATCCCT AGAAGANTTT  
 CAAGATGTTT ACATAGTCAT GGAGCTCATG GATGCAATC TTTGCCANGT GTTCAGATGG GGCTAG

SEQ ID NO:1149: (Length of Sequence = 364 Nucleotides)

GGCAACAGGG TGAGACTCCA CCTCAAAAAA TAAAAAAA GAAAGATATT ATTCAAGAAA AGAACTTAGG AGCCAGGTGC  
 AGTGGCTCAT GTCTATTATG CCAGTACTTT GGCAGGCCAA GGCAGTAGEN TCACTTGAGG CCGGGAGTTC AGAGACCACT  
 CTGGGAAACG TAGCAAGACC TCGTCTCTAC AAAAAAAGTG TTTAACAAT TAGCTCAGTA TGGTGGCACA TGCTGTAGT  
 CCCACCTACT CAGGAGGCAG AGGCAGAAGG ATGGCTCGAG CCTTGGAAAT CAAGGCTGCA GTGAACCTAAG ATGGTGCCAT  
 TGCACTCGNG GATGGGTGAC AGAGCAAGAC TCCATTGCCG CCAG

SEQ ID NO:1150: (Length of Sequence = 267 Nucleotides)

GACAGGTGTA ATCTAAGCTT AAATAAACCC CCCGGAGGCT GCACAATTC TTGGCATCTC TCCCCTGCCC TCTCCATCCG  
 CATATTCATT TTGGAGTTTG GAGAAGTATC TAGAATCTNC TCCCACCCCA AAATGCCAG CAGAGCCCCC CCGCGCCCC  
 CGCACCCCTT GGAGCTGCGG CTGTCTGAAT CGTTGAGATG TCTGANACTG TCGGGGTTC CTACCTAGTG CTTCAACCAG  
 ATCACCTCAC TTTTGAGTTT CCTTCT

SEQ ID NO:1151: (Length of Sequence = 386 Nucleotides)

GGAAGACGAA GGAGGAGTAA AGGCATGINT CACATGGCAG CAGGCAAGAG AGCGTGTGCA GGGGAACCTGC CCCTTATGAA  
 ACCCTCAGAT CTGCTGAGAC TTATTCATA CCATGAAAC GGCACAGGGA AAACCTGCCC CTAAGCTTCA GTTACCCCCG  
 ACAGGTCCCT CACATGACAC ATGGGGACTA TGGGAGCTAT AATTCAAGAT GAGATTGGG CAGGGACACA GCCAAACCAT  
 ATCAGATACT TACCACATTA GACACTGACA GACAGCTCAC CACAGATTCT GGGCTCTATT CAAGGTGTTG ACTTTGATCT  
 TTTTCCAGTT GTAAATGTTT CATCCAAAAA AACTGTGATT TTGGCATAAC TTTTTCAG AGTTGC

SEQ ID NO:1152: (Length of Sequence = 239 Nucleotides)

GCAATCTTTT GAGTGACTTA CTTTGAGTCT TTGTACCTT TCCTCTGATT TTTTCACATG GTTTAACTCA GTGTACCCAA  
 GAGTACTAGG TGCACTCAAT TCTGCTATTA ACTCTATAAG CAAGTNCITA AGAAAGTTAA TGTTAAAAA TAATCTTAA  
 ATTGCTCTGA TAGGAAAAAT GTATTTGAAA TTAATAAAAA TTCTTATGTT GACTTCTTGG TTTTGAAACA ATGAATATA

SEQ ID NO:1153: (Length of Sequence = 275 Nucleotides)

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CAACCTCCTC TTCAGTGTCA AAAAAGCCAC GGTTAGACCA GATTCCTGCC GCCAACCTTG ATGCAGATGA CCTCTAACA  
 GATGTATGTT TTGTTCTCCTC CTTTCATCTC TAATAATTGA TTTACCATGT TTTTCTAAAA TACTTGTAT GTCTTINCTT  
 TAAGAAGTGA CATATATTTA TGTITAGTTA CTGTTATTCA AATATAGCCC TGACCTCAGT GCTAAACTTT ATAGTTGATT  
 TTAAATCAA AAGTATTATT TTGTGGGACT TTAAG

SEQ ID NO:1154: (Length of Sequence = 203 Nucleotides)

CCTAAATCTT AAACCTTACA ACAGTTAAAT AAGACCCCTT TCAAAGGAT TAACACACTG AATATTATAT ACATACAGAT  
 TTATATTTAT GCGCTATACA CATATATGGN CTTTATCTGT ATATAAATAT GTGATGATAA TGATAAAAGG ATAATGATTA  
 CACGTAGGAT AAACATTTAT CAAAATTGT ACTATAAATA ATA

SEQ ID NO:1155: (Length of Sequence = 343 Nucleotides)

GAAAACAAA CACTAAGCTA TTTTGAACA ACTGTTCTAC ACAGAAGAGA GCTTCTCTTA ATTTAAAAA AAAAAAATC  
 CCAATAGGC ATTTTATAGC ATTAACCAA AAAGAGAATC CAAATGAAAT ATTATACTTG ATGTTCAATT TTAATGCAT  
 CTGATAAAG GIATGCTTCC TTTCATTGA NTACATTTCT GNACATGTAT GTTATAAAT CCAGGNAACA GCCAAACCAC  
 AAGTTAACTC TTAACAATGA ATATACATAG TTAACCCAT AGTAAGCAGC CCGTTTGAA AGCACTGATG CACCCAACAN  
 TTATATGGTT CCATTCATA AGG

SEQ ID NO:1156: (Length of Sequence = 396 Nucleotides)

CCCACCAATT GCCATTAAAC CTCCCAATCT TTAAGGGAG GNTCTCTACT TACTGTTTCA AGGCAAAAAG ATGATTAANC  
 TATCTCATAT GGTGTGAATT TGGGCTTAA ATAAATGACT CTAGTGGTAG CATTTCAATG AGGCAGGTCC AAGGAAGACA  
 GATTTGTAGA CAGAGTTGGG AAAAGGGTCA AAGAGCCAAT GAGTCTCCCT ATCCTGAGGG ATGCCCTGAC GGAGCCACAG  
 CATGANCTCA TGTTTTCCTG AATCCATCTC AGTTCATGTG ACAGGATGGA AATGCTTCCT TTCTTAGCCA GTGTGCTTG  
 TAACGAGTTC CCTGCAGCTC AGGGAAGGGA GCAACATGTA CTGCTTTGTT GCTTCCTGTA TAGAGAAGGC AGGAAT

SEQ ID NO:1157: (Length of Sequence = 269 Nucleotides)

CAGGGTCTCA ATCCGTCTCC CAGGCTGGAG TGCAATGGCA CAATCTCAGC TCACTGCAAC CTCCACCTCC CGGGTTCAAG  
 TGATTCCTCT GCTCAGCCT CCTAGTAGC TGGGACCACA GGCCTCGCC ACCGCAACCA GCCAATTTT GTATTTGTAG  
 TAGAGACAGG GCTTCACCAC GCTGGCCAGG CTGGTCTCAA ACTCCTGACC TCAGGTGATC TGCTGCCTC GGCCTCCAA  
 AGTGCTGAGA TTCCGGCGTG AGCCACTTG

SEQ ID NO:1158: (Length of Sequence = 190 Nucleotides)

CTTATTAGTT AATCCACGG CAGATTTTCA TTTCTATCGA ATATATTATA TGTAAGAACT AGGGCCTTAA ATAATTAGC  
 TGACTTINCC TATTAGTTAT TCCTTAAGAT AAAATTATGC TGGTGAAAT NACTGNGAA TTCTCAAGA AATTAAGCTC  
 TATAGAGGCA TAAGTAATCG AAAGACTTTT

SEQ ID NO:1159: (Length of Sequence = 340 Nucleotides)

GGGCACTGAC TTCTTGGGAG TGTAAGCNC TCACCTGGAC CCCACAGCCA GTGAGCATTG GTGCTTATAT TOCATCCTCC  
 AAAGCTCTTT CTTCATACCA GACCACACAT GTGGCCCAAG GAGGGATATT TACTCTGCAC TTTTAGAGTT CTAGAAAACA  
 TTGTTTAGTG GTCTGGCATC ATCTATATT ACTTGGCTTG ATTTGGGATA GAGTATAATC CTAGTCTCTG ATGAAAGGAT  
 TTTNATGAGT TAACCTTATG GSGTGATGGG ATTTATGGGA TTATTTCCAC CCTTAAATG ATTTTGTGGG GAAAAAAGT  
 GTACTAATCC CTAATTTAGG

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SEQ ID NO:1160: (Length of Sequence = 215 Nucleotides)

GTAAACAAAT CAATTAACAT GATTATCCCA GACCTTTCTT TCCTTACTGG AAAAAAGAGG GCATTAAACT GGATGATGAC  
AATAACACCA TAACTACAAG CTTTATATAA AGTCCTTTAT ATACAGTGTT AATACAGTGA AAGNTCAACC TTATTGAAAG  
AGGTCTGGCT TCTGCCCTCA GCTACTGGGA AACAATCACT AGGCCTCTGG CATGT

SEQ ID NO:1161: (Length of Sequence = 298 Nucleotides)

AATCTTTAAA ACTACTTTGA ATCTTATAGA AACATCAGAA TCTTTTGAAT TCAAAAGAAG CCAGGGACTC TAGCCAAAGT  
GGAGTGGTTT TTTAACTCAA GGATTTAGGA CCTTGGCTGA ATACAAACAT TGAATGATTA CTCAGTAGGT GCCAAAGCTC  
AGGACTTTAG ACAGAGTCAG AGTCCAGTTT GTNCTGAAAC ACAATTIGAT TTCAACTATT GTTTTAAGTG AGAGAGGAAA  
GTGACATTAT TATGAGTGTA AATTTNCTGC TTTTAAAGTA GAAGTACTG ACAATIGA

SEQ ID NO:1162: (Length of Sequence = 163 Nucleotides)

GAAATAAGAA ACAGCTTGTA TATAACTAAT GCTTTGAGGG AGAAATTCAA ATGGCTATGA AAAATATTT ATAATTCAAT  
GATAATAAAA ATCTTACACG TTAAACTTG AGAATGTAGT TAAAGCAATA CTTGGNCATA ANCTTAGCAC ATATTAGTAA  
AGA

SEQ ID NO:1163: (Length of Sequence = 393 Nucleotides)

GCCAACACCA GGAGCATTTT ATTCAGATGT TAAATGAACC AGTTCAAGAA GCTGGTGGTC AAGGAGGAGG AGGTGGAGGT  
GGCAGTGSAG GAATTGCAGA AGCTGGAAGT GGTACATAGA NCTACATTCA AGTAACACCT CAGGAAAAAG AAGCTATAGA  
AAGGTTAAAG GCATTAGGAT TTCTGAAGG ACTTGTGATA CAAGGTATT TTGCTTGTA GAAGAATGAG AATTGGCTG  
CCAATTINCT TCTACAGCAG AACTTTGATG AAGATTGAAA GGGACTTTT TATATCTCAC ACTTCACACC AGTGCATTAC  
ACTAACTTGT TCACTGGATT GTCTGGGATG ACTTGGGCTC ATATCCACAA TACTTGGTAT AAGGTAGTAG ATT

SEQ ID NO:1164: (Length of Sequence = 260 Nucleotides)

TGCATTCTTG CCTCTTGAC AAGTCTGCT TCTTACAAA GGACTTTGCA AGTNCCTCAC CCAGACCATC TCACCTGTAC  
CGAAATAACC TCCCCTACTA GCGAATGAGC AACTTTGGAG CAGAAAGCAG AACTGCATC ATATTCTCT TACTATGCAA  
ACTGGTAGCT CAAACCTCAT ATGACCTCAA AAAACTATAA TTGCTTCAAC CTAAAAAGC TGATTGTAAA AAAAAA  
NGCTGTGGTT GCACACCGT

SEQ ID NO:1165: (Length of Sequence = 330 Nucleotides)

CATTGGTATT TAAAAATGAA TATTAATATA ATGAAATGGN TTTGCCTTTT TGTAGGCATA ATAAGCCAAA TACTTTTTTA  
CCCAAATAA TTTTINAGAGA AATGATGTA ATGAAAAATT GTACCATGAA TTAGGAGCAT AGTTTTINCC ATTTAAACGT  
CACCATTACT TAAAAGATGA TTGATTATG CTATACCAA TCAGATGAAC TCTGTTATC ACTTTCTNC TCTGTCCCA  
AACAATTTGS TTCATTGAGA CTGAAATGTT TGTTCTTCA ACTTATTAGA ATGGAAGATA ATGCAGATAT TTCTGTGGGA  
AATAAATAA

SEQ ID NO:1166: (Length of Sequence = 312 Nucleotides)

ATTGGAGATG CCTTGTCAA ATTNCCCAT TTAAATGGC CAGGAAAAAC AATAATTATT TTCCTGATGC TGAGGTTTTA  
TATCTTAGTA GAAGAACTTA AACTATGACT TGTATTCAAG TCTAACAGGA ATAGAGGTAA TGANTGAAAG TAGTCATTGA  
CCTGGGACAA GATCACTTTG AACATGACAC TATTATACAA AGTGTAATAT TTATTTTAA ACAACCACTT TTCAAAGCA

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GTTGTGCATA CATTCCAAAG AATAAAATGC TAGCTACTAG GTTTTGAGAA GCAGAATAAA ATATGATACT GA

SEQ ID NO:1167: (Length of Sequence = 305 Nucleotides)

AGGAAAAGGA TTGATCACAG GAGAGGTACC AAGGGAGTTC CCAGAATAAT AGAAAAGAGG NTCTCAAGA AGACAGTCAC  
GCAAGAGACC AAGAGAAGAG CTAATCCAAT TGATGCAGGA GGAAGTAGAG CTTAGAAAG AATGTCTCAA AAAAGAAAAA  
AAAAGAAAGG AGTGGGTAA GTATCTGATG ANTTINCAA ATTGAGAGGA GTTACATAGC TCTATTGAAA ATCTTAGATA  
AANNIGATTG ATAAATACAT AGANCATAAA GCAAACACTG AAATAAGGCA ATTATCAACT CCAGG

SEQ ID NO:1168: (Length of Sequence = 342 Nucleotides)

AAGGTTTTAG TGATGATTCA GTGAGAAACA TATTGAAGC AACAAGCACA GTAAGTGGAA GCTGTAGGTA CTCAATAAGT  
GTCAGTTTCC TTCTCTTCT AAAAGCTGTG CTTTCAAGTC AATTGTATGT CTAGAGTCGC ACTGTCTGGT ACAGTGGCCA  
GTACTAGCCA CATATGGCTC TCAAGTACTT TAAAGAGGGC TAGTCTGAAT TGATATGTGT CATACTGTA AAATACTTTA  
AAGAGGGCTC ATCTGAATTG ATATATGCCA TGCATGTAAA ATACAAATCA GATTCTTAAA ACTTTGTACC AAAAAATACC  
ATAAAATAAC TTACTAATAA TT

SEQ ID NO:1169: (Length of Sequence = 397 Nucleotides)

GAGACGGAGC TCCNTCTGTC GCCAGGCTGG AGTGCAGTGG CACGATCTTG GTTCACTGCA AGCTTCACCT CCCAGGTTCA  
CACCATCTTC CTGCCTCAGC CTCCCGAGTA GCTGGGACCA CAGGCGCCCA CCACCACGCC CAGCTAATTT TTTATATTTT  
TAGTAGAGAC GGGGGTTTCA CCGTGTAGC CAGGATGGTC TCGATTTTCT GACCTGTGA TCCGCCCCCN TTGGTGTCCC  
AAAGTGCTGG GATTACAGGC GTGAGCACA ATGCCAGCC TTGGAGACA CTTTGTATTG CCACAATCA GGGTAGGGAG  
GGCTGGGAAA TATTACTGGT GTGTAGTGA TCGAGGCCAG GGATGCTGCT AGACATCCTG CAATGCACAA GGACAGG

SEQ ID NO:1170: (Length of Sequence = 422 Nucleotides)

GTTTTAAAGC CTCIGGACAG AGCAGTATTT CGTTTAAAC TTTGTTTTTC TTAAAGCTT ACAGTGTTG GCTAATTCTC  
CTCCCCTTTT TACAAGACGG GGGCCGAGG GTGGACACTG GTGGCAGGT AAGGGATACT GTCACTTTAA GAAGCCTGCA  
GATTGAAGTG TAAACATGGA GAAATTAGGG GCTGATTTTT TAACTGTGT GAGATATTAA CCAGCCGCC TGTATATAAA  
TCAGGAAATC CAAACAGCGA TTTACACCGA TTAACACCCC CTTTATATAT TTTTACAAA AATACACTGA GAAAATAATC  
AAACGTTTTT ATCTCTCTTG TCTTTTTTTG TTTTTTAAA GTGTCAAAG TCTACATNTA AATATAAAN ATTAAGATT  
AAACTCTAGC CTTTCACTGA GG

SEQ ID NO:1171: (Length of Sequence = 384 Nucleotides)

TCTGAATGGG TTGGTGAAAG GTTACAGGAG CAGACAGCCT CCACACCCAG GCTGCTCTTG GCTATACAGG CTACCTCCAT  
CCCTGANITG TGTAAATAGGA AAGTCTAAAC ACACAGAAGA GGAGCACAAA ACCAATAATT ATCACACATT CAAAATAAAA  
CTAATCCATA AAGAAAAGTA CCAACTCAA CAAAGACAGC AATGCCTGAA AACACTGGGC TGTATCAGCA AATAGAACAA  
AGAAAATAN GCATAATTAA AACAGTAGAA GGTGAAGGAT AATTTTTTAAA ANTTAGATAT CATATCTGA TTATTGAAAT  
AAAAAACTTA GTAGAAAAGC TTAAGTGAAG AGGATCAAAC CTGAGGAGGA CCCCAGCAGT TTTG

SEQ ID NO:1172: (Length of Sequence = 418 Nucleotides)

GAGAGAAAAA AAAAAATCT TTTAAAGCT GCCATCTGAG GTGATGGCTT CTCTGTACTT ACGCCATACC CCAGANTACA  
ATAAATAAGC AATTAGAAAA CGTTCAAGTA TGAAGGGATT TCCTCTCCC CGCCAAAAGC ACTGCTCTCT GAAGGAAGCT

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GGTTTCTCTG TAGCTACACC AGCTGTTTCAG AAAGCTCAIT GGACCTGGTT TTGAAAATAA AACAAAGTTA AAACCCCTGGG  
 AGGAGTTTAT GTNCAGTGTG GAGTACTCAG GCTTTCTTAT AAAGAAAAAA AAAGGTTATC TGGTACCAAA GTGTGCACCT  
 ACAGACCCTC AGGTACTGCC CTGTGACTTC NCTGTATGAC ATCACAAGGC TGCCAAGTGC TGCTTTNCTA GACTAGGGAG  
 TTGGTGAGGT TTTGCTAG

SEQ ID NO:1173: (Length of Sequence = 274 Nucleotides)

GAGATCTAAA TGAAATTTAT AAGAAATTG TGGGTTCTGC CCAAGATGAC ATCTAAATTG AAGAAGGTAC ACAGTGAGTT  
 TAAAGGATCA ACGAGAGAAA CTTTTATTAT TCATTTCAC AAGAAGACAC ATTCAAGTATC TGGATTATCC AATATATGGA  
 ATACTTTGAG TTGAAATGAT TAAAGGGTAA TCTTTAATCA TTAATTAACA AATCATTAAAT TAANCAAAAT AATATTTAGC  
 AAATTAAGCA AGTNTAAAG GCTACATGCA AACT

SEQ ID NO:1174: (Length of Sequence = 326 Nucleotides)

AGAAATTAAG AACTTTTAAAT ATAAACATTT CCAGAAATATA GACTGACCTT ATATCAGTAC TTTTNGAGAC CGTTTTAAAA  
 CTATATATCA TCTAAGTTTA TTATAGACTG TTTCAATTTT CACTTTCAGA ACTAGAAAAT GCAAAAATAC ACTGCAAAAT  
 AGATTTAACA AAGAAAAAAT CAGTTTAAAG TATTTTATAC ATATTCCTTG GNGAAAGCTG AGACACATAA ACACAGNAAA  
 ACAACAATAA AATACCACCA AACTAACAC AAAACCAAGG AAAGAACTGN TTTTGTAAAC CTGTGTAATT CTGTCTTTTA  
 AAATAA

SEQ ID NO:1175: (Length of Sequence = 426 Nucleotides)

GCAGTCAGGA TGGACACATT AGAAAGAAAC ATTTTAGTTT CAATGTTACC ATAAAACCAG AACGAAAAGC AGCATGCTGT  
 ATTATATTIN NCAATTTAGG TTCCATTTCT AACTCCACCT AAAATGAATA TGAACAACT CATTTTAAAG TGTTTGTGAG  
 TCAAAATACAA TAATAGTCTA AGTTTATTC CATATGTACC AACCAAGCC CAATAAGCT AAAAGGAAGC CAAGTGTAAT  
 AAAAAGGCAG CTATAAGGTC TTGTGTTGA NTTTTTACCC AGCAAGAAAT AAATGATACT TAGTAATCCA TCTTTCCCCC  
 CCACTGCCAT CCTGACACAC ATCTAAAATA GCTAACTTC ACCTATTCTA ACTTCTGAAA TTGTTTGGG ATTCTGTGT  
 TACTTTCTCA GAGTGGATGG TATAGC

SEQ ID NO:1176: (Length of Sequence = 301 Nucleotides)

CTAATCTCA ATCTATCCC TTTCCTCTT AGCCATCCTC TCTAATTINT TTAACCTAAG CCTGTGTGTC CTCAGAAAAT  
 AGGTTATGCT GTTGGTGTGT GTGGTTGTA ATCTATATAC ATGGNGTAT GCTATGATT TTGTTTGGTA ATCTCCCTTT  
 TTAATCAATA CTATATTIAT AAGANCCNT TAAGTGGTTG TATGCCTCTA CTTTATTGCT TCTGACTGCT GCATGGNATT  
 CCATACTCAT GTCCACCACA CTTACTCATT CTCCCTCTTG ATGGACGCTG AAGTTGCTTG G

SEQ ID NO:1177: (Length of Sequence = 331 Nucleotides)

GCAATTCTCC TGCCTCANCT TCCTGAGTAG CTGGGATTAC AGGTGCCTGC ACCACGCCCG CCTAATTTTT GTATTTTATG  
 TAAAGACAGG GTTTCACCAT GTTGGTCAGG CTGGTCTCGA ACTGCTGACC TCATGATCCG CCCGCCCTCAG CCTCCCAAAG  
 TGTGTTGGATT ACAGGCATGA GCCACCAAGC CCGGCAATC CATGCTTTTA AACATTACTC TGTATGGTGT GATAATGAAC  
 AGTCACTGNT ATCTGACTGT TCATCTGTGT GGTCCATCTG TATTGAATAA AGGAGGAAGG AGTTGAAGAA TAAAGGGGAA  
 AATCTTGACAG A

SEQ ID NO:1178: (Length of Sequence = 325 Nucleotides)

GAAATINTTG GAGAGAATAG TCATACCTAC TTAAAGAG AATAAATTGC CTTTCCTAAA TNCCTCTGCT TCGCTCCTTT  
 CCTGGCGTTG CTCTGGAACC TTGTGAGTTA TATGTATGAT TNCCTGACTC TGATATCCAT CAAAGTGCAT AACATAGTAC



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TCATGATGCA GTAAGTACAA ATCTTTTTTG AAAGAGATAT TGCTGTGTA CATTITGGAT TTATAACATT GGCTTATAAT  
ATATACAACA TCTTTATAAA TGCCACCTCA GTTGGGTTTT AAGCCTTACA AGAGTGCTAT GAGTAAATAT CACCCACTTT  
AAAAA

SEQ ID NO:1179: (Length of Sequence = 297 Nucleotides)

CCTTGGGAAT TGTTCCTTGG AAATTAAAGC ATGTGTCTCA CACAAACAGT AGAAGGCATT GAGCATTTCAT TAGTCTTTCC  
TCAAGAAGAT ATCAAAATGA GACTAGAAAC TCTCTGGTGA ACACAGAATG CTCGAGGGG GNCCAAGGTA CATTATGACC  
TTAAAACGAA CTCCTTCTCC ACTGGCCCTA TTAICTACTG TGGAAAGCAC CATGCCAGGC ACAGCAAGAG ACTTAAGAAC  
ACCTACAAAG GAAGATCTCT NCCATCCACT TGTGTAATTA TCTTTAAAAA GTAATCC

SEQ ID NO:1180: (Length of Sequence = 278 Nucleotides)

GCTGCTTGGG ACTTGAAATC TGTGGCCGAA GACNGTCAC TACATAACTT CAAAAATAAT CAACCACCCT CCTTCCCAA  
ACCAOCCAAA TTCCTCATC CAGCGTTTAC TTTTTTGAAT CCCTCAGAA CTTTTTNCCTG CGACCCCCCT CCTTAAATGG  
AGTTGGGTGG GGGGGAATG AATACTGAGT TGGCCTTAT TTTTTTAAAG ACTTTTGTAT CCAATGAGGC CCCCTAAATA  
ATTGAGTTTT GGGTCTGGT TGGTTTGTAT TATTTTGT

SEQ ID NO:1181: (Length of Sequence = 331 Nucleotides)

AATTGAGTTA CAGGAGAATA CTGTGAACAA TTGTACAGCT AAAAGTAATA ATCTAAATTA AATGTACACA TTCCTAGAAA  
CACACAAATC ACAAANCTG ACTCAAGGAG AAATAGAATA TCTCAACAGA CCTATAACAA CTAAAGATAT GGAATCAGTA  
ACCAAAAGCC TTCCAACAAA GAAAAGCCCN GGANTAGATG ATCTTCACCTG ATGGNTTCTA CCAACATTT AAGAAAGATT  
TAACACTAAT TCTACTCAA CTCTCCACA AAAAATATGA GANGAGTAGA GAAAACCTTC TAAATATCT TATGAGGGCA  
GCATTACCGT G

SEQ ID NO:1182: (Length of Sequence = 345 Nucleotides)

GTGTGINTAG AGGGATGGAC AGGATGCTGT TTATTNCCC TTTCTTGAA ATGGACCTTC TGTCCCTTCC ATTTGGACAC  
CACAGTGGAA GCTGGTGGCC TGGGAAGGAAG GATTAGGTCA TGGACATTG AACAGGTGCC TTGGGCATGA TGTATAGATG  
CAGTCATATA TACCTTGCTG GGNITGGGGTG CCACCTCCAG TGNCAGCTC CAGATCCAAG GAGCAGCCCC CTGGGGATGG  
ACCCCATTC TATCATGA CTCCAACAG TTTTINATTG TGAAGAAGA AACTTTNGCA TTATAGAGAC ATCATCACA  
AACAGTANAA ACAAATCAA CCTG

SEQ ID NO:1183: (Length of Sequence = 272 Nucleotides)

ATGGAAGATT CAGAGATCAA AGGTGAAGTC CTCTATCTCG GCTACTACCA ATCAGCCTTC GACTGGNATG ATGAAACANC  
CAAGGCCTCC AAGCAGCATC GTCTTAAACG CTACCACAGC CAGACCTATG GCAATGGGTC CAAGTGCGAC CTTAATGGGA  
GGCCCCGGGA GGCCGAGGTT CGGTCTCTCT GTNACGAGGG TGCAGGTATC TITGGGGACT ACATCGATCG CTTGGACGAG  
CCCTINTCCT GCTCTTATGT GCTGACCAAT CG

SEQ ID NO:1184: (Length of Sequence = 335 Nucleotides)

ACATTTTGCA AACTCAGTTG ACTCACCTCA NATTTGCCAT TCCAATTACA GGGCTCGAA AGAGTCAGCA CTCAGCCTTG  
CTCAAGGNTC AGATTTAGGG GTTGCCCCC GNCCTCGCAA CCTCCACCT ATTGTTTCAA ATGTCTCAA GACAATCACC  
ACTGTATTAA GAGAAAGAGG CATGGGGGCA GAGCAACAAG GAAATAAATG AGGCTTGAGA ACTGTGTCTA GGTGGGGTTA  
CTTTGAACCT TAAACCAACC TTGGGNCCCA AATCTGCATG AGCAGGGGGT GGGCTATCAT GCTACAGANC CCCAAGGAGG  
ACATTTTCC CAACA

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SEQ ID NO:1185: (Length of Sequence = 383 Nucleotides)

GAGAGGTGAG CAGGCGTGCG GGGGGGGGAC TTCTGCAGAG AAAATATTTT TAAAGTCATA AAACCATGAA AATAACAAC  
 ACTGTACGTT TTATTTTATA GAAATCAAGT AGTATCTAAT AGACAAGGGA AGACATTGAT CCATAAACTT TTTAAAGAAA  
 ATTTGGTAAT CTCTTAAAGT ATTTGTATGG CTTTGAATGG GTGINCTTTT CTAACTTTGT TTTAATTTT ATGATACACT  
 TATAATTGTT TCAAATAGGC ATTTGTNCAT TTTAAACTA CTAGAAGTTA CACTGAAGAA AAGCATTCAA AAGAAGACTT  
 TTGGACAAA AAAATTTGTTG AATGAGTGAA ATGCCTGAGG TAGCTCAATT TACCAAACAG GAA

SEQ ID NO:1186: (Length of Sequence = 373 Nucleotides)

GGGGCTCAAG GTGTGCATGT NTGAGGGAAG AGAGAGAGAG AGAAGGCCGC CTCANAGGTG ACTTTCAGCC TGCNAGCCTT  
 CTTCCCGGG CGCCATAAAC GCCCCCAATT TCCAGCTGC TAAAGGAAGA GGAAGGTACC TGTNCGTGCA CGCAGACGGG  
 AAGGGCTGGG GAAGCGGGAG GACTGAGAAA AGCCAGATCT TAGCAAAGCA ATGTCTCAAG ATGGTGCTTC TCAGTTCCAA  
 GAAGTCATTC GGCAAGAGCT AGAATTATCT NTGAAGAAGG AACTAGAAAA AATACTCACC ACAGCATCAT CACATGAATT  
 TTGAGCAGAN CAAAAGGGC CTGGGTGGAT TTCGGAAGCT ATTCATAGA TTT

SEQ ID NO:1187: (Length of Sequence = 365 Nucleotides)

TCTTCGCAAT TCTGAATAAA GTTTATTAAA TAATATGTAC AGCAAATGTA GTAATTCAAC ACATCTATTT ATCAAATCAA  
 TCCACTGCAA TGAAGAAAAA TAAATGANCA GAAAAATCTA TGCTGCATA GGCATGCTC TCAGTGTGTA ATTTAAATGG  
 CAATACTTTA AATTAATTGG TTATATATAA TGTCAGTTAT TTTCTTTTCA GAATATAACC TTTTTTGTAG TAACCTATTC  
 TAGCAATAGG GCTTAATACG NCTGCAGATA AATAGGNTG CAAAACCAA AAACCCAAA TAATGAAATT NAAAAGGGGA  
 AAAAACTGT AACTGNGNTC AGAGTTACCT TTCTCCCCC ATAGG

SEQ ID NO:1188: (Length of Sequence = 350 Nucleotides)

ACTATGGCT TACATTTATT TTAAATTTCA CTAAATACAA ATCTTGATTG TCATGCCAGT TTTAGATCTT ATTAATTINC  
 AGAATGGATA AATTCAAATA ATCATAAAT ACGTAACTT TTTATTATAC CAAGGTGTC TAATGCCATC ATATGANGAC  
 AGATGCTTCA AACAACCTGC ATTAATATAT ATTTNNAATA AAATTAATAT CTATTTTAA CCTATTGTGA GTCACAAACC  
 GAAAACGTGT CGNCTTTACC TTAGAGCTAA AGGCTTACTT TATGCATACG GGATATTTAA TAGTCTACAA ATCAAAGGTT  
 TAAACAGNCC CTTAAAAAT CCATATATTC

SEQ ID NO:1189: (Length of Sequence = 393 Nucleotides)

GCAAACCTNC TCACTTCCTC AAAGAAGAGT AGTGCACTAA AAAGAAGGTT GCACCCGGAG AGCATGTAAA GTGTCTCAAG  
 GGGGACATCT GAAGTNCCTC GTTCCAGGG AGCCCACTGG CTCTGCACAA GTAATCTAAT GAAAGCTATG CATTCTCTCT  
 GGGCTCCTCA TATGAAAAAN CCCAATGTAT GANGCAAAGC CTAGAAAGGA TTCAATACTG GAGAAATGCA CACAGCTACC  
 GATAAAGACA GCTCAAAAGT CCTAAGGCTG CTGACATGAA CCAGATAATT GGTGGCTACA GTTGTGCCCTG CTAAGATTTG  
 GGTGCATGGG GCTTCGCTTT GGTAGCTCC CATGGTCTTC TTTTCCAAA AAAAAAAG AAGNCTTCAG GTT

SEQ ID NO:1190: (Length of Sequence = 365 Nucleotides)

AGTGTAACA TTCACATATT TAATAGTACC TTTAAATATA GCATTACTAC ATTTAAATG GTTCCAAAT GAATCTATAA  
 ATGGTAATAT AAATTAAAAA ATACGAACCT AAAGTGAATA AATTTTAAAC CTTAGCTATG GTATAAATAA TGGTAAATG  
 ATAGTGATCC TGTAGTCAT TAAATGTCT TAAAGATAA CAGCTTGTTA CCAGAACATT AGANACCATA GCCATGATTC

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TCAAGCGNTA ACAATCTACA TTGNTATTT NCTTGGCCAC TGCAATCTTC AAATGANTAA TAAATTTCCA GAATTCCCAT  
TCCCATGGTG TTTTCCCAA TAGANCTTT TCACACTCGA TGTG

SEQ ID NO:1191: (Length of Sequence = 303 Nucleotides)

CCCGGAGAGC TGCCTTCCTC TTCTACCACG TGAGGACACT GCAGGAAGAC AGCTGTCTAA GAACTAGGAA GTGGGCCCTC  
ACCAGACATT GAATCTGCGC TCCTTGAAC TGGACTTCCC AGCATCCAGA ACTGTGAGAA ATAAATTCAT GTTATTTATA  
AACCAACCTG TCTATGGTAT TTTTGTAGC AGCCTGCAGC TCTCTATCAC TCTTGTATAT AAGAGGCTGA AGTTTACTTT  
ACCTCAGGCA GAGCTAAGCA AAAAAGATTA CATCCCGATT ACAAGATGAA AGTAAACAGA ATT

SEQ ID NO:1192: (Length of Sequence = 315 Nucleotides)

ACTCCAGCCT GGGGAACAAA CAAGCAAGAC TCCATCTCTA AATAAAAAAG AGTGTCCCC TAAGATGCTC TGCGAAATAT  
TGTAAGACTGG TGTCTCTCTT GGATGATGTT TGCCGTCAGC ATTACCAAA TAAACTTGCT CTCTGGGAAA AAAAAAAAAA  
TAATAAATAA AATAACAGT AAGAAACACC CATAAANCA ATTTCTATGC TCCTGCAGCC TCTTTTGGC TGAGCAAGTG  
GGACCTTGGT ATACACATCA CCTGINCTIN CCTTTTCTT TGAAATGTGG TGTGTGCTGT TAAATTGGGA TTGAA

SEQ ID NO:1193: (Length of Sequence = 313 Nucleotides)

CGAATTAGTG AACTGTGCTT CAGGTTGAGG AACCTGGTCT TAGCTCCTTG CCTGCTGAGA TTTTGAGTTA CAAGTAGAAT  
TCTCCAAAAG CAAAACAGT AAAAGTCATT TTNCCACTCT TTTGGTCAAG CACATGTAAG CTTCAGGAC CAGGTGGTAT  
GCCGTINCTG AAAGTGAGAC ACATGCCCCA GGGAAAGGGT AATTTTAAAA TTCTTCCCAT AGGTCTCAT CCTGTCTCTC  
TGCTATGTCC AGCATCTTN AGTCCAGCT GCAGGGCCTA TATTTAAATA CCTCATGCT TTATCGCTTT TGT

SEQ ID NO:1194: (Length of Sequence = 341 Nucleotides)

GATTTAAAG CAAGTNATTT TNAAATCCAC GAAAGATGCC TACCTTGGNT CCTNCTCTGG TCCTTATTAG CCACACCTCT  
CTTGACAGGC AGAGGAGTTA GGAGTGAGGG GATATTCCCA CCAAGACCCT ACAAATTGCA CTCTTAGGCC ATGCCCTGGG  
TACCCAAACT CTAGAATTCC CTCTCAAAG GGACCTTAAC CCAACTTCAG AGCCTATATA GGCCAATTCC TTGGTCCAAT  
TTCCAAGGGG TGCNCAAAG ACAACCATTT TNGGGAGGNN GANGGGAGTA GGATGAAGCT TTGCNACGT GGGTCTTGGG  
CAAATCCAC ATATCCCGGA A

SEQ ID NO:1195: (Length of Sequence = 239 Nucleotides)

TTATTGATTC TTTTTTTGAA ATGGAGTCTC GCTCTGTNNC CCAGGCTGGA TTGCAATTNC NOGATCTCAA CCCACTGCAA  
CCTCCGCCTC CGGGGTTGGA GOGATTCTCC TGCCTCANCC TCCTGAGTAG CTGGGACTAC AGGTGCGCGC CACCATGCC  
AACTAATTTT GGTATTTTGA GAGACAGGT TTCTCCATGT TGGTCAGGCT GTTCTCAAGC TCCCAACCTC AGGTGATCA

SEQ ID NO:1196: (Length of Sequence = 291 Nucleotides)

CCATGCTTGG CTCAGGGCCT GGGGCGGGT CCTGGGTAGA GTCCTAGCCC CAGAGCCCCA GCGGCTCATG TCCTGCCGCC  
CCTCACTGAC CAGACGATGA TCGGNAACCT CTTGAGAAAA CATGGCAAAG GATTAGAAAA GGGCAGGGTG AAATTNCCAA  
GCCACTCAGA CGGAACCCAG ATGATCTTCA ATGCAGCCAA GGAGCTGGGT CAGCTGTCCA AACTCAAGGT TCACATGGTA  
CGAGAAGAAG CCAAGAGCTT NACCCCAAAG CAGTGCGCGG TTGTTTGAGT T

SEQ ID NO:1197: (Length of Sequence = 303 Nucleotides)

CTTCATATTT TTATAGCTGG GGTCAAAATA TGCAATTTAA AAATAAATAT ATCCATTINC CTATTCTTAC ATTTATGAAT  
ATAAAANTAA AATCTAAGAA ACATAATGCT GCCAACTAAT AGTAGTGGAG GAAAGGAAGC TGAGAGAAAG ATAAATATAT

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TANTTTAATC ATTACTCAGA AAAGGCAGTA AAAGATACTA TCTATAGCAG GCATCAATAA ATATGANCCA TGAGCCAAAT  
CAGGCTTACC ACCTGATTTT NTAGGATAAA GTTCATTGNA AACACAGTTA CAGTGTCTTT CCA

SEQ ID NO:1198: (Length of Sequence = 318 Nucleotides)

CTCAATTTCT TCTCATCTTT TINATGCTAT TATTGTCATA TAAGTTACAT TCCTATACAT TGTGTGTCCA ACACAAATTT  
AAAAATTATGC CATTTGTCTCT TAAGTCATAG AACAAAAGAG ATACAAACAA AACATACATT TATCCTGTCT TTTATATTTG  
CCTATGCAGT TACCTTTACC AGTGTTCCTT ATTTCTNCAT GTGGATCTGA GTTACTGTCT TTNAACTTCA ATCTAAAGNN  
CTTTCAGTCT GAAAGACTGT AATTTTAAAT TCINGTAGGG GTAGGTTAAC TAATGATTAA TTCTCAGTAT TCTGAGGA

SEQ ID NO:1199: (Length of Sequence = 326 Nucleotides)

TCTAGTTATT CTGAGAACTA CAACCAAGAA AAGAGGGAAG CACCGGGTIG GCCAAGGCCA TCCGGAGACT TGTCTGTCTG  
GGTCATTTAA AAAGCTTTTC TAGGATAACG TTGGCTTTCC AAGTGGTTTT CCAAGCTGAT GTCTTTCCCA CTGAGGAGAA  
GCTGTAGGCC TGTGGACTGC CAGGTAGGAG GAGGTTGAGG TTTAGAGGAA AGAGGAGAGC AGGAATGGGT TGTITNCAGT  
GGGGCTGTTT CCAATGACTC ACCAAGAAGA AATCGAGGTG CTGATGGGGC TGCACAAGTG CTTATCAGAA ACAGCTGTAA  
CAAGTT

SEQ ID NO:1200: (Length of Sequence = 341 Nucleotides)

GGGTGACAGA GTGAGACTCA GTCTCGCTGA AAAAAACAAC AACATTGCIT TACAGTGTGA TTCCAGTTAC AGAGAATATT  
CACATAGGTG CATAAATAAA TGAAAAAATT ATTGGTTAAT GTCTCTGTAT GTTGGGATTC TCAGTGATTT TTTTTNCTA  
CTTTTNAATTT TINATAATTC CTCCAGTGTG TTGGTGTAG CTTTATAGAT TATATCAAGT AACCTTTTGC TGCACCAAAA  
AACCCCCCAA ATCTAGTGA TTAACAACAA ACCATCTTAC AATTTTNNIC AGAAGTGTCT AAGGCTGGAT ATTTTACTGG  
GCTCTCTCT GAATGTGGGG G

SEQ ID NO:1201: (Length of Sequence = 312 Nucleotides)

GTCTTTINTA CCCTGCTAGC AATAGCTCTC AGTTTCAGAG GCACAGTCTT TGGAGACCAT TCAGCACTGA GAAAGCAATA  
TTTAGAACCT ATTGCAAAAC TGGGCTGAG TTAGGCATGG TGATGAATGC ATCAGCAAGG AATAGAAAGT NCTTATCGTG  
AAACCCCTTCA ACCTCAACTA TGCCTTCATA GACACACACG TTCATGCACA TGTAGGCACA TGTACCATCT CACATCTTTC  
ACTTTCCTCGA GATGCCATAT ACAATTACCT ACATTAATAN CTGTAGCACT ATACCTTTTT GAGCCCGAGA GA

SEQ ID NO:1202: (Length of Sequence = 344 Nucleotides)

GGAAAATAGC CAGACTG3GT ATTATGCATG TAACAAATGA GGACATTGTG CATAAGAAAG GAAACATTAG TTTTCTGTCA  
TCTTGGGCCA AGTACCTCAT TACAGTAAAT GTGTGTCTTT GGAAACTCTT TGCTGTINCT GATGGCGGTA AGCATGGGGT  
CCCAGGCAGG TTCAAAGGCT GAACGTGAAG AAATGGGCAA GACAATACAT TTTGTTTTGG AAGGAATTTT TCATGGGATA  
AGTTTCCCAA AGCTTGAATT ACAGGCTATG AAATAAGCA AATAGATGGA GGAGAAAACA AGTATTGTTT TCAAAAAGGT  
ACCAAGTCAA TTCTATTTAA AGGA

SEQ ID NO:1203: (Length of Sequence = 370 Nucleotides)

GTCTTTTATC TTCTCTCTCT TATGTCACT ATGTAATGTC CTCATCATTT TAAAAGTGAG TTGCTATTGG GCGGGCGCGG  
TGCTCAGCG CTGTAATCCC AGAAGTTTGG GAGGCCAAGG TTGGTGGCTC ACTTGAGGTC AGGAGTTCAA GACCAGCCTG  
GTCAACATGG TGAAACCCAG TCTCTACAAA AAACACACAC AAAAAATTAG CTAGGCATGG TGGCACACAC CTGTAATCCC  
AGCTACTCGG GAGGCTGAGG CACGAGAATT GCTTGAACCC AGGGAGGCGG AGGGTTNCAG TGAGCCCAAG ATCGTGCCAC  
TGCACTCCAA GCTTTGGGGT GACCAGAANC GAGACTTCTT CAAAACAAA

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SEQ ID NO:1204: (Length of Sequence = 346 Nucleotides)

CTCTTTAGAA AGCCTGCCTT GGCTGGGCCT GGTGGCTCAC CTCIAATCCC AGCACTTTGG GAGGCCAAGG TGGGAGGATT  
 GCTTGAGCCC AGGAATTINA GACTAGCTGG GGCAGTGTAG TGAGACTTTG TCTCTACCAG AAAAACC GGG CGTGGTGGCG  
 CATGCCGTGA GTCCCACTA CTTGGGAAGC TGAGGCAGGA GGGTTTGCTT GAGCCCGGGA CGTGGAGGTG GCAGTAAGCT  
 GTAATTGTGC CACTGTACTC CAGNCTGGGT GATAGAGTGA GACCCTGTAT CAAAACAAA CAAAAACAA AAACCTGCCT  
 TCTNGGGATT GGGCTTCTGG GTTTTT

SEQ ID NO:1205: (Length of Sequence = 292 Nucleotides)

TACAACGAGA CACTTGAGCA CACGCTACA CCCAGACATC TTCGGGCTGC TATTGGATTG ACTTTGAAGG TTCTGTGTGG  
 GTGCCCGTGG CTGCATGTTT GANTCAGGTG GAGAAGCACT TCAACGCTGG ACGAAGTAAA GATTATGTIT GTTATTTTTT  
 TTTTCTCTC TCTCTCTC TTAAGAAAGG AAAATATCCC AAGGACTAAT CTGATCGGGT CTTCTTCAT CAGGAACGAA  
 TGCAGGAATT TGGGAAGTGA GCTGTGCAAG TCCTGAAGAA GGAGATTGT TT

SEQ ID NO:1206: (Length of Sequence = 336 Nucleotides)

TTGCCAACAC AGTGTGTCAT GTTATTGGG CTATTCACAG GTAAGCTTAA AATACAATGA AAAGAAAAGA CCAGACGTCA  
 TCAGGAATGT CGAGAAACAA AATATTTAGC ATTTCTTAGT TTCAAATGTT ACCATTTTCAT TGCAGCTGAG GAATATAGGC  
 CATTCGTTGA CATAACTGCA ATGGGTGAGA CTTATTTTTA GCCACAGGAA GCAAATACAT TTAACCAATG ACTTTTAGGA  
 CAGGAAGCAA AAAAGAAAAC AATATTTTCA TGTAGCAAGG ACAAGANAAT CATTTATACA AATTAAAGTG GATATTAAAA  
 TACCATTATA AAGAGG

SEQ ID NO:1207: (Length of Sequence = 319 Nucleotides)

TGCCTCANCC TCCAGAGTAA CTGGGATTAC AGGCGCCGCG CGCCACGCTT GGCTAATTTT TGTATTTTTA GTAGAGATGG  
 GATTTINCCA TGTTGGCCAG GCTGGTCTCC AACTCTTGAT CTCAGGTGAT CCACCTGCCA CAGCCTCCCA AAGTGCTGGG  
 ATTACAGGCA TGAGCCACTG CGCTGCCTC CATTTCCCTT TTATAATTCA TCCCTGAACT CCCTTAAGGT AGAGAAGCTG  
 TTTGATCGTC CCAGCCCCCTG GGAGGCTGAA AGGTAACTTN ACCAGCTCCA TGCCTGAGTT TAGCACCTGC TGTGCCAGG

SEQ ID NO:1208: (Length of Sequence = 357 Nucleotides)

GAGATGTTTA AAAATGAAGT GGAAGTTTTT TGTTTTTGTT TTGTTTTTGC AGAAAAAAGA TTTTAAATGG CTGAATGTIN  
 CTGCCATAGT TGCTCAGAT TGTGAGAAA TTATGTTGTA CATCTGAGAG AGAAAAAGAG AGCCTTTTGA GGAGCTGGCG  
 TAAATTAATT TTTTGTTTAG TCTCTTAACT CTTTGGCTTG AATGAGTCAT TGACTTTCTT TGCCAAGATA GGGTTAGCAT  
 TTGTTTTGTG TTTTAAAAGC AGGCCAAGGG ATTGCCACGA GGGGAGACAA CCTGAGCAAC TGAAGGAAGG AATTCTTAGA  
 AATTGTTT ACCAGTTGTT TTAGTCTGAA TGTGATT

SEQ ID NO:1209: (Length of Sequence = 362 Nucleotides)

CCCATCTGCT CCACCCAAAG AAATCAGACA AAGTAAATTT TATTGAGACA GACAGAAATG CACCTACTCA GGACTACAGT  
 TAAGCATTTA CTATTAAACCA AAGAGTTGTG TTCACATTCC AGATAAGTCT ACGTGGAAAA GCATTGAGAA TTTACTAGGT  
 TTTTNTACA TCACTATTTT ATCTACAATA GGGACAACAA ACTGACACTC AGGATTTGAT GGGCTCTCAT TACAATGCTA  
 TACATTTAAC AGGNCNAAAC ATCAGTGAAT TTGAGGAAAA AGTTATAAAA NGACCAAAAC CACCCACTGT AGGATGGGCT  
 CTTGATGTT ACTGTACAGC GTGGGTCAAG GTAACAAGGA GG

SEQ ID NO:1210: (Length of Sequence = 349 Nucleotides)

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GAGAAGATAG TAGAGAAAGT CAGCGTTACA CAAAGGAGAA CCAGGAGAGC TGCTCTTTT GCCGCAGCTA CCACTTCCCC  
TACTCCCGA ACTACAAGAG GTCTAGGAA GAGTGTAGAG CCACCTAAGC GTAAGAAGCG GGCCACAAAG GAGCCCAAAG  
CACCAGTCCA GAAAGCTAAG TGTGAAGAGA AAGAGACTCT GACCTGTGAG AAGTGCCCCA GGGTATTITAA CACTCGCTGG  
TACCTGGAGA AGCACATGAA CGTTACTCAT AGGCGCATGC AGATTGTGA TAAATGTGGC AAGAAGTTTT TCCTGGGAAG  
TGAGCTGTCC CTTCACCAGC AACAGACT

SEQ ID NO:1211: (Length of Sequence = 344 Nucleotides)

TTTTTTTTT TTTTTTCAGG GAAGAGCTTT ATTGCTTCCA TGGGGGTGGC CTGGGACGGC TGCCACAGCT TGGTAAGCT  
CCTTGGGCTT CANITCCCTT TGGTCCAGGC TAAAGGCAGA ACCCAACCAC CTGGCAGTNT TGTGTCTGAA ACCTAGAACA  
TGTGGCAAGT TGGTGAAGTCC GGGCCTGCGG TAGTCCTATG GNTCAGCTGC AGCTGTGGAG GGGAGCTCTT CCCAGCAGGC  
GGANTGGCG TCACCTCCTT GAGCTTTAAA GTTCTTTCTG CTATAGCCTT GGGCGGTCT. TGTGGCTCC GAAGGAATGG  
GCTCCAGGGT TCCCCATGG GACA

SEQ ID NO:1212: (Length of Sequence = 364 Nucleotides)

AAAGAAAACC TGGTATTTT ACCATCCTCT CTGAAAATAA ATACTTTGAC TTGCCTGAT TACTACTTCA TCAGCATTCA  
ACTCGCTCC GTGGCACTCT GTGTGAATAA TTTTAAAGGC AGATTAAAGCA TTCTAAAAAT AAATTTCTATT GGTAAATTAG  
GATATCAGAT GCTTCCATTA TAAAAGCCTA TCCTATTCTG TACTCTCAGT TGGCAGTCAT ATCCAGATCT CAAGCTACTC  
TGGCTCTTAT TGAACAAGAA CCTATTCCAG GNGTGAGGT TTTGAAGAGG GGATCTCTCA TGGTTAACTA GAGNCAGGAA  
GAGGCAGAAAT TGCCACATA CTCTNGCAGG AGTTAAATAA CAAT

SEQ ID NO:1213: (Length of Sequence = 302 Nucleotides)

CTAATTTTTG TATTTTTAGT AGAGACGGAG TTCTACCATG TTGGCCAGGC TAGTTTCAAA CTCTGACCT CGGATGATCC  
ACCCGCTCG GCCTCCAAA GTGTGGGAT TATAGGCATG AGCCACTGTG CCCGTTACT TTTTCTTTT TTAACACT  
GAAATTGCTG TATCTACCAC ATTAACATTT TATTTAAAAA AATTGTGTTA ATAGCATATG TATGTAAATT TAATATTAA  
ATACCTCTTT TTTGTCTCTT CTCTAGGTGG TTGAGCCTA GGGATACTTA CTCTAGATT TT

SEQ ID NO:1214: (Length of Sequence = 317 Nucleotides)

CTAATTTTNC AGACAGGTTT ACAITGAAAA GGCTAGGTAT TTAGCCACCT CAGCATTGAT TAGTTTTGGA TGTCTAAGCT  
CTGTTACACA TGGCTTCCA TGGCTTCACT CTACAAACA TATTINCAAC GTGAAGGNTA CATCTACAAG AAATCTACAT  
TTCAAGGGTT TTACAAATCA ATCTGTATC TTCCCTTGA ATTGACTCTC ACAGACCCCG TCCCCTTGTN ATTNCCTTTG  
CCCAGCTTAA CGTCCAAAG TCTACTTAAA TGCAGCTCAA AAATGTTAAG ATTGGGCAAC AGATTTACAG TTCTGT

SEQ ID NO:1215: (Length of Sequence = 276 Nucleotides)

ATAAGGTATT AAACAATAT TCTGTACTT GANITAAAAA AAAATCAAGC TGGGTGCAAT TGCTCATGGC TGTAATCCCA  
ACACTTTGCT AGGGTTAAGT GAGAGGTCA GCCCAGAAGT TCAGTACCAG CCTGGGCAAT ATAGTGAGAC CCCTTCTCTA  
CAAAAAAAT GAAGAAATTA GCTGGGTATG GTTGCAATGN CTGTGNNCC AGCTCCTCGG GAGGCTGAGG CTGGAGGNTC  
ACTTGGGCCC AGAAGGTCAA GGCTACAGTG AACCTT

SEQ ID NO:1216: (Length of Sequence = 354 Nucleotides)

GCATAGGCAG CCCCTGCTCT TGCAATTACC TCCCACGTGA ACTAGCTGCT CAGTCATTGC TCTGGAATAT GGAGTGTGA  
TCTAGAAATT AAAGATGGGA TTAGGTAAAC AGTGAGGTCC CTCTACTGCT CAGTGTATGA CTCTCTTCTT TGTAATGTC  
ATATGTAGGG TTCTGTACAC AGGACATTTT CTTCATTGTA GTTCTCAGA TGCAATTGAGC TCTCTGAAT GACTTAGCGG

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GGAAGCTCAG TTGCAGCTGA CCGTATTAAG GGTCTCTCC CATTGTGCTG TGCCCGCTCG TTAGCGTAGG ATTCTGCCCC  
CACGGCCCTT CCGTTTTCT AAGGGCTTGG CTTT

SEQ ID NO:1217: (Length of Sequence = 272 Nucleotides)

CTTCCAGCT TTGCTTGT GTAAACAGCT GGCAGTGGT ACATCTATAT TTGTTAAGAG GCAGAGCACT GTATTTTGTG  
TAAGATAAGG TGCTAGTCTT GGCCAGGCTG CCAAGCTGGG GCTNTTTAA ATAAAAGTTT TAAAGAAAAA TTATAGCATA  
ATAAATTACA CAATTTTATT GGAAACTGA AGGTGTTCAA CCAATGCTAG TTTTAAATA TATTAGAAA TACTATTTCA  
GGAAATTTTA ACTACACTCA TTAGTCTTAT GG

SEQ ID NO:1218: (Length of Sequence = 281 Nucleotides)

GTGCCCAGG CTGCAGTGCA CTGTGCAAA CGGGCTCAC TGCAGCCCA ATCTCCCACT CTTAAGCAAT CCTCCACCT  
CAGCCTCTG AATAGCTGGG ATTACAGGTG TGCAGTGCCA CACCCAGCTA ATINCTTTAA TTGTTTTTAT TTTTAGTAGA  
GATGGAGTTT CGCTATGTTG TAAAGGCTGG TCTGGAACTG CTGGCCTCAA GCGATCCTCC CGCCTTGGCC TCTCAAACG  
CTGGGGTTAC AGACGTGAGC CACCATGCCT GGGCCTGCTC A

SEQ ID NO:1219: (Length of Sequence = 231 Nucleotides)

GTCTTCTCTC CCTCCTTCCC TTTATTGGCA CTGCCCGAA CCAGGCAGCC AGCAGGGGAT GGGATCAGGA TGCAGTTGTC  
ATGGAACCGG TTGGGGATCC ACAGGAACGA CATTATACA GGGACATTIN TGAAAGCAAA GCAAGAATGA NTGCTTTCCC  
GATCTCAGAC TGGCTGGATT CAGATCATTG TTTTGGCTGG TTCTCATTIT AAGGGGTAAG CAGTTTGCTA T

SEQ ID NO:1220: (Length of Sequence = 409 Nucleotides)

AGTCACTCAG AAACCTACTT TGCTACAGC CTCATTATTG TTTTGTGTAT TTGTTAAGAT ATTCCGTGTG ATGACATATT  
TTGCCATAAA TTINCTAATT TTCTGGCCA TTGCTTCTCT GTGATTGAA AATGTTACGG TAAGTGCTTA GTTGGAAAC  
TATACTGTCA ACATATATTG CATTACTTCA GCAGAGCTGT AGTTCCATAA CATAATAAAA TGATGCTTTT TTTAATAAGA  
AGATCATACA CATTTTATTA TGCCCTAAAA GATGAACATT CAAAGTTCAC TTTTCTCTTG TTTTGATATG ACGGATATAT  
ATCAGTAAAA TAAAAAATGC TGCAGNACCA ATATGCACTA ACTCAAACAT GCTGTGGATT TGTAGGGGCA CTGAGGTAGC  
AATGTCAAG

SEQ ID NO:1221: (Length of Sequence = 396 Nucleotides)

ATCTGAGATA CTTTGTCTC ATGAATAAAT TAGTTAGTAG AATCTAATTT CTAGATCCTT CATAATGGTA ATTGAGGGTA  
AAAAATAATA ATGTAGTAGT CAATTTIAGC CCTTTAAACC TATGGGGAAC TGTATGAATA ACTGTTTGAA ACTGCAGGGT  
AATCCTGTCA CACTTGCAAA CACATAGAAG CAACAAGACT ATTTCTCTC ACACTTTAA TTAAATAGT GCCTGAGTAG  
ACTTCCAGGG TAAGGTTICAG AAATTINCTT TCTAATTTCC CTGTTTTAAT GACCACTACT TTTAAAGCTA TCGTGGGAAT  
TCACTTTCAC ATATATCTAA CTTACAGGAA ATTTTTGAAG AGCCTAAATG TCTATGGGTA GATTCAATGT TTCTT

SEQ ID NO:1222: (Length of Sequence = 350 Nucleotides)

GTATTTNTTT CTGGGTACTC TTCATGGCCT GCTAGAGAAC TTTACTAAAT TATAGTCCAG TAGCTGGACA GAGCTGCATG  
TGTATTGTCT AAGTCCACCT GTGCTGCTGG TCAAGATTAT TTGTCAGTGT TTGGTGGTGT TGAAGAGGAA TACTGTTGTG  
AAGGCTGAGT CAACTGCATG ACAATNCTCA TGGCTCACTG GCTGATGAGT TGTGGCATGA CTAGAAAGCT CTGCTTGTAT  
TCCAGATGA CAAGTCACAC CTGAACAGCT GGATACTACT CGCATCCAAT TTGCTTCCAA GTTAACATAT TTNCAGAAAA  
TATTGGATT TGGAGTACAT ACAAATATT

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SEQ ID NO:1223: (Length of Sequence = 370 Nucleotides)

ATAAGCATAT GANTTTATCT ATAGGCCAAG TTAATGACAT AACTACAAAG AAATGACTTG TTTCACATGT TTTAAACCAG  
 TGTTTTGGCT ATACTAACTT AGTGAGACAT ATTCTAAAGA AAAATAGAGA CGCAAAGAAG ATCTTACACT TTAATAGTCA  
 ATTTTGTAGT TGTAAATATTA CTATCGATCA TTTTGTAACT CTCCTATATA GGGTGTAGGA TGGTGGAAAT AAGTAATTTT  
 NTTAATGTTG TTAGGAACCA AGGCTATCAG TGTAAATGA AGGAGTTACA AGCATAAGAT TGANAGACGG TAAGTAAAAA  
 GCTCATTAGT ATAGTTCCAA GTTTAACTTG TCAGGGATGA GTCATGATT

SEQ ID NO:1224: (Length of Sequence = 188 Nucleotides)

ACATGACCNA GGCTGACCA AATCAGACTA AATCCTANIA CCTATACCAG AGTTATTGAG AAAGATAAGN TTTGGCCTGC  
 NGGCCTTTGA CAGTGAAAGG NNTIAGGCIT TGGAGCTCCT CAGGGCCACT GCTTCAGGGA ACCTTGCTGA CAGTGAAGCC  
 AACACAGATG AAAGCAAGGC CAAACATT

SEQ ID NO:1225: (Length of Sequence = 353 Nucleotides)

CCCCAGCCAA GGGAGGCACT NAGTNAAGTGT GGTACCCAGC GTGGGAAACC GTGCTTTTIN CCATGGNACT NTGCAACCCA  
 CGGATTAGAA GATCCCACTC AGGAACCCAC GNCACCTGNA CCTAGAATGC CAACCCAGA GCTGCACAGA TTCTAAACAA  
 CCTCTCANCT GGAATCTGCC TAACCCCTGCA GAGCTCCTGC GGGGAGGGGT GACCACTGCC ACANCTGCTG CTGCTGCTG  
 CCTAAGCCAT TTAA

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CAAAAAGTGA GAAAAACATG TAAACGTAAG TNATGAGSTA TTTCATAGAT ACAGTGCCCA TACAAATNCT CTTTCCACA  
 ATTTTCAACT GCCAGATCTC TTGCTTTAGT CTTTTTNCCT TATATTTGGA GAAACAGAAG AGTTTGACAT AAAAGTCCCT  
 TTGAGGATGT GAGGGTTGCA GTAGTTTACA GCAGGGTCAG AAAATGAAAG TAATAAGCA ATATTTACAT GTTTTGTAT  
 AAGACCAAAA ATATTTCCCT AAAAAGTTGT TAAAGTTT TTAGTCTAT AAACACTCAC TTTTATAGGG CACATGATTG  
 TCTGTGTGAC TTCTCTTCC AGAGGAGGAC TTT

SEQ ID NO:1227: (Length of Sequence = 352 Nucleotides)

GGCATCTGTT TTTTGTGTTG TTTTGAATA GAGTCTCACT CTGTCGCCAG GCTGGAGTGC AGTGGCGTGA TCTCGGCTCA  
 CTGCAATCTT TGCTTCCCG GTTCAAGCGA TTCTCCTGCC TCAGCCTCCC AAGTAGCTGG GAGGTGTGCA CGCCACCACA  
 CCCCAGTAAT TTTNGTATTT TTTGTAGAGA TGGGGTTTCA CCATATTGGC AAGGATGGTC TCAATTTCTT GCGCTGTGTA  
 ATCCGCCCCG CTCAGCCTCC CCAAGTGTG GGAATCCAGG CGTGACCAG GCGCCCGGCC GGNATCTGTA GATTTTAAAA  
 GGCCCCAGTG GTTCTNATGC ACACCCCCAG AG

SEQ ID NO:1228: (Length of Sequence = 387 Nucleotides)

AGTTTTCCAA GATTGAGTGA CACTATTGTA ATGAGAATCT TCACTGGAGC ATCAGAAGAA CTGATTTCAA GCCAGTTTTG  
 TTGCTCAGCA CGGTCAAAC TTCAGAAGAA TCTGTGCTC TGAGGCTTTC CAAAGCTTTG TTCCCCAGGG CAGTAACAGC  
 TTCCAGTGT GGCAGAGTCT TTAGTATTAT CACCAGGGCA GCTGCACTGT GGCCTGTAGC CATCTTCTC TTTTAGTACG  
 ATCCACCTG TCAGACTTCT TGAATTTGCA CTTCAAATTA GAGCCACAAT CAAATTATCA GTCACGNITG TTATTTTGT  
 CACCAGAGAA AGGACAGAGT CTGTTTCAGC AGAGTTTGA GCCAGTACT GATCTCTCT CAGCAGG

SEQ ID NO:1229: (Length of Sequence = 366 Nucleotides)



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CTGATAAGGA GGTAAATTTC TAGGAGCTGC TAAGATGGGC ATGAGGNTCA AACTGCAAAG CACCAACCAC CCCAACAACC  
 TGCTGAAGGA ACTCAACAAG TGCCGGCTCT CAGAGACCAT GTGCGACGTC ACCATTGTGG TGGGGAGCCG CTCCTTCCCG  
 GCCCACAAGG CTGTGCTGGC CTGTGCAGCT GGCTACTTCC AGAACCTCTT CCTGAATACT GGGCTTGATG CTGCCAGGAC  
 CTATGTGGTG GACTTCATCA CCCCTGCCAA CTTTNAAGAG GTTCTGAGCT TTGTCTACAC TTCAGAACTC TTCACAGACC  
 TGATCAATGT TGGGGTCATC TACGAGGTAG CTGAGCGTCT GGGTAT

SEQ ID NO:1230: (Length of Sequence = 343 Nucleotides)

AGTGGAGAGA AGCCCTATGA ATGTTTTGAG TGTGGGAAAT CGTTTTGCTG GAGCACAAC CTCATTGAC ATGCCATTAT  
 CCACACTGGA GAGAAGCCCT ATAAATGTAG TGAATGTGGA AAGGCCITCA GTGCGAGCTC GTCCCTCACT CAGCATCAAA  
 GGATGCATAC TGGGAAAAAT CCCATCAGTG TAACAGATGT GGGGAAGACCT TTTACAAGTG GACAAACCTC AGTTACCCTT  
 CGAGAACTTN TTTTAGGGAA GGACTTTTGT AATGTAACCA CTGAGGCAAA TATTTTCCA GAGGNAACAT CTTCTCTG  
 ATCTGATCAA CCATACCAAA GAG

SEQ ID NO:1231: (Length of Sequence = 406 Nucleotides)

CTCTCGCCGG GCAGCTTGA GAAGGCGCAA TACTCTCCAG CTCCACCGTT ACTTCAGCAT GGCTGGGGAG GCCTTGGA  
 ACTTATAATC ATGGTGGAG AGGAAGCAA CATGTCTTC TTCACATGAC GGCAGGAAG AGAAGTGCTG AGCAAAGGGA  
 GGAAAGCCCC TTATAAAACC ATTAGATCTT GTGAGAACTC ACTATCATGA GAACAGCATG AAGGTAACCG CCCCATGATT  
 AANTTACCTC CCATGGGCTC CTTCCGCAA GACGTGGAGA TTATGGAAC TACAACCTAA GATGAGATT NGGTGGGGAC  
 ATAGGCAAAC CATATCAATG TACATGTGTC TTTATGGTAG AATGATTAT ATTACTTTAG GTATATAGCC AGTATTGGGA  
 ATTGCT

SEQ ID NO:1232: (Length of Sequence = 380 Nucleotides)

AGACCATCAA AGGCCAGAG GAGAGACTCT TGGGACAAAT AAATATTTAA AAGCAGTTGC CTATGAGAAA ATGGAAAAAG  
 CCACAAGCAA AGGTAAGATC CATGCTCCAA AAAGGCCTGA GAAAATCTTA AACCTTCTCC TCAGATTGAT CCCAAGCTT  
 AGAACGAATA CCAAGATAAT AGCAAAATC CTCCCTGGAA AAGAGTCAGT CTGCAAAAAC CGGAAAAGGA GGTGTGTTTT  
 TCCACAATGC CTAATTTCTA ACAACAACAA CAAAACTCA GAAAACATGG CCCAATAAGT GGAAGAAAAT AAGTGACGG  
 AAACCTTCCC CGGAGGAAAC ATAAGCTTCA GGCAAACTAG ACAGATTTTA GACTGTCTAA

SEQ ID NO:1233: (Length of Sequence = 357 Nucleotides)

TTCAAAGTTT ATCACAACCA CCACCATCAA GACAGCAAAC CAAAGGGGCA TGGTAAAAGA AAGTTCCAGT GACTCTGGAT  
 TTGGTTCIAA TTTAATGCA ACTTCTTGAT TGAGTGCAAG GTCAGCACTA CTTGGAAGTG GCTTTGGCGT TTCANCGGTG  
 GGTAATGGAG ACATTGCCAA ATTTATATTC TGTAATTTTN CGTTGGGTGA GGGGAGCAAT ACATCATTAT ATAATGGTAC  
 TTCTCAAGT TGCTGGTCAT CAGTTTCTGT GTGTTGCTG CCAAAATCTA AAGATATGAT TGINTCTCCA GCGGCTGGGG  
 CCAGCAAAGT TAAAGCATCA GGTTCCTTCT TAAGTTT

SEQ ID NO:1234: (Length of Sequence = 313 Nucleotides)

CCAAGAAATC TTAATINCIT TATGTTTGA CTTTTGACT CAACAATTTT TTTAAACTT TTTGTTTTT NCTGAAACGT  
 TCTGTGTGTT ATGAGCCTTT TGTTTGTINC TCGTTAAATG CACTCGACCC AAAATTTGGT TGGCATATCG AAAAGGAGAC  
 CAAGGAGGGA GGGGCTGGGG CGTGGGAGGT GGGGAGGAGG CCCGAATGGA CAGAAAGTTG AGGATAAGAG AAGAGGAACA  
 TAGAGACAGC CAGAAAGACA TGGGGAAAGA GTGTTGGAGA CAGAGAAAGG GGAAGGCAAG GGAAAGCCAA AAG

SEQ ID NO:1235: (Length of Sequence = 386 Nucleotides)

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CTCTCTCAGC ACAGCCTGGG GAGGGGGTCA TTGINCTCCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG  
 CTTGCCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTTG TGACTCTAAG CTCAGTGCTC TCTCCACTAC  
 CCCACACCAG CCTTGGTGCC ACCAAAAGTG CTCCCCAAAA GGAAGGAGAA TGGCAGCCTC CACATCTCGG GTTCAAGTGA  
 TTATCCTGCC TCAGCCTCCA AGTAGCTGGG AITGCAGGTG TGCACCACCA TGCCTGGGTA ATTTTGTAT TTTTAGTAGA  
 CACGGTTTCA CCATGTTGGC CAGGCTGGTC TGGAACTTCT GAGTGTAAT GATCTGCCCA CCTTTG

SEQ ID NO:1236: (Length of Sequence = 401 Nucleotides)

AGGATGTACT TCTAGTAATG TCACTGAAAG CAGATATCAA AATTCATTAC CAGGAGTACT TTGCTGTGA ATGGTTCCTG  
 TGCCATACAG AGATAAGATG GAGTCTTTGG AAAGTTGTTT CTTTGCCACT TCTTCTGATT TINTAGTTTG CTCAGTGAAT  
 AAATCTAGAT CCCAGATGT TACTGTAGAC AGGGTTGCAG CTGCTGGTGC AGAGGGTGTG CCCTGAGACA AACACCAAAA  
 TAAGCTATCA AATTCTGCAT AGTAAAGCGC ANTTAATCCA TTACTTAAAA TCCAAATAAA GTTATAAAAT TAGATAGGAA  
 TCAAACAATT GTAGAAGGTA AAATGGTGCC ATTCAAGAGG ATCATTACA AGCCCGAGCC ATATAAAACC ATCTACAATC  
 A

SEQ ID NO:1237: (Length of Sequence = 372 Nucleotides)

TTAACTCTTT CIN<sup>1</sup>TCITCA GTCGATTAT AGAGTTGGAG CAAATGTCAT GATGANCITT NAGGCCTAGG CCTGNCCTCT  
 TGAGGTGIGT GTG.GTGTGT GTGTGTGTGT GTGTGTGTGT TTCTTTCTCC ATAATAGTCC CAACCCATAA CAGGGGTATG  
 GCACAGTACT TCTTATGAAC AAAAGTGCTA TTGGTCTACA AGGGGACTTG AGCCTGCACT AATTGTATTT GATTAGGATT  
 TTTGTGCTGT CTGTATGATG TTAAACCACA CTGTCAATTA CAGACTTCCT TTAAGGAATT TCCAGGAAAC CCCCTTACCA  
 TAAGAGTTTA AATTAATAGT TTNCTAGTTT AATGACAGCA GTTGGTAAAG GA

SEQ ID NO:1238: (Length of Sequence = 304 Nucleotides)

GGACAAAATT CCAATTATG TAAATGTAA AGAAAAGACA ACAAAAATAA GCTAGAAAGA TGAAAGCTAA AAATCTATT  
 TGAATATGT AAGATGATGA CAGATATTAA ACAGTAATTA GTCATGAAAC AATCATTTAA ATGCTTTTNC CAGGGGAAT  
 GCAGAAGTTG AGACCCCTCA AGAGCATGCA AGCTAGTAGG GAGGCTGCGA CTCATACCTT TGAATCTTTC TGTTCTGCAA  
 ATTCTCACT CTTACCAATT TAACTCTGCA GTACTGCTAT GGAAATTACA TAAGAGTAA TTGG

SEQ ID NO:1239: (Length of Sequence = 389 Nucleotides)

TGTTATAACT GGCACITTA TTTGTTTTTG GAACTAGAAT TTAGGGGCAG TTGGATGAAA TTGCAAATTT AGAAGGGGAA  
 TAAGAAITTC CTAGTGCTAT ATAAAGAAAT GATGATGGAG ACAAAAGCCT TGCITTCCTC TTTTLAGAAT TTATTNCGA  
 TTTINAGCAT ACTGTGGGGC TTTTAGAGCT AATATGATCT AAATNCAGAA AATTTAATTT TCATAGTAGG CCAGGTGTGA  
 ATTACTTATG TTTGCTATAG AATGCTTATT TAGACTAACA ATAAATTTAC TTTGCTTTCT AAGGCCAGTC AGCGAATGTG  
 GGGATGAGGC AGGATGTTTT AAATGAGCCA GAGATGATCC NCAAGGGGAA CAGTCGACAC AGAGGTCTT

SEQ ID NO:1240: (Length of Sequence = 365 Nucleotides)

CTCCAGCCTG GGCAGACAG CAAGACTCCG TCTCAAAAA AAAAGCCTTC CTTGCCAGGT GAAAGCAAGA GTGGTATGGA  
 ACATTTATTT AAACATAAGA AGCAGAAGGT TCCTCCTCTT GCAAGTATGT TTTCTCTAAA TGTAGCATTT CCACTGGAGG  
 AGGTGGTCTG GGTGGATGGT TAATATGTGA GGATTGTNCA GCCAGGCAGA TAACCAGGCC TCTGCATATA CAGATACCCA  
 CAGCCCAGGA ATCTTGAGAA CTGAATGGCC CATAACAACC TCTGGCACTA TCGGAGCTGC AGGGAGGCTT GGCTGGGGCT  
 ACTCCAGTCT CAGGCCCCCTG TTTTATAGCG GAAGTCACAA GGAGG

309

SEQ ID NO:1241: (Length of Sequence = 350 Nucleotides)

GGGGAGGCGG TAGGGTCTGC NCTGTCTGTN AGGGGCTTGT GGCTTGGCGG GTGGGCTTTG CATGGTCTCG CCTCTTGAGT  
 CCAGCCCGT CCTGATGGGG CAGACTTCTG TNCGTNCTGC TTCTGGGGTG ATGTCAATAC TGAATGAGAG GGCAAGAGAA  
 GGGGAAAGGG AACCGCCCAT ATGTNCTTCA CGTGCTGCAA GGGGGCTGTN TGGTTCCCAT GAAATGGTCA GCAGAGACTT  
 TGGGATGGGT ATGACTCGTG GGTACAGGG TGTACTAGAC AGAATCTAAA GAAGGTGGGT GCTTAGCTNG GAAGTCTTCA  
 GTAGGAACGG ATCACTGTGA AGCTCTAGGG

SEQ ID NO:1242: (Length of Sequence = 392 Nucleotides)

CTCTTACGAG TGAGGTTAAG TATTGAACAG ATATTTAAAA GCTATAAGCT TTTAAACAGA ATAGGCATAT TGCTGATACC  
 AGTATTTGAC AACCGCCTTG TTTTTCAGA TAAGAAACT GAAGCACAGA GACCATAAGG CATCAGCCTA TGGTCATTCA  
 CTTCGTGGTA GTCAGGTGG AGGTACACC AAGGCCCTCT GGCTACTGAT AATCTCTGTA CTAGGCTGCT TTTCACTAAA  
 CTCTTGAATG AATGAAAGAA AGAACACATA CTGTTGACTT TTGAACCTGA ATCTAAACAA AACCTATGTT GAACTTTAAG  
 TCTGTAATCT AAGAACTATC AACTTAAAC TTGTTACAAA AGNGGTGAT GAGCACAACC ACTTCTTTTT GG

SEQ ID NO:1243: (Length of Sequence = 377 Nucleotides)

GTGGGGCAGG CGTGAGGTAG GGGTGGGGTG GGGATGACAG TCAACACAGC TTGGACCAGA AGCCCATGGC GCCTGGNTCC  
 CTGGAAGGC ACAGGGCACA GACGGATGCC GCCTTTNITG CTGGGACACT CCGCCACCA TCCACAGCTC CCGGTCCT  
 CCAGTTCTT GACTTGGTG AACAGGTGT AAAGAACCCT CAGGGTGGAT TTNAGGTCCA AGTTAACCAC GTCTTCAGGA  
 CGAGCCTTG GTTNTINAG GCCTCGTCC AGCATCAGCT CAAAGGOGAA GGACACATTN TGGACCTTCT GATCGAAGCT  
 TTCGGAGTC AGGTAGAAGT GTGGAGAGG AACAAAGTAG TCTTCAGAA GGCCCAT

SEQ ID NO:1244: (Length of Sequence = 312 Nucleotides)

ATTTTNCAT CAATGTTTAT CAAGGATATT GGTCTAAAAT NCTCTTTTC AGTTGGGTCT CTGCCAGGCT TTGGTATCAG  
 GATGATGCTG GCCTCATAAA ATGAGTTAGG GAGGATCCC TCTTTNCTA TTGATTGGAA TAGTTTCAGA AGGAATGGTA  
 CCAGCTCCTC CTGTACCTC TGGTAGAATT CGGCTGTGAA TCCATCTGGT CTTGGACTTT TTTTCTGTTG GTAAGCTATT  
 GATTATTGCC TCAATTTTCA AGCCTGTGT AGGTCTATTC AGAGATTCAA CTCTTCTCTG TTTTAGTCTT GG

SEQ ID NO:1245: (Length of Sequence = 320 Nucleotides)

GGAGATCGTG CACATCCAGG CCGGCCAGTG CGGCAACCAG ATCGGGGCA AGTTCTGGGA AGTCATCAGT GATGAGCATG  
 GCATCGACCC CAGCGGCAAC TACGTGGGCG ACTCGGACTT GCAGCTGGAG CGGATCAGCG TCTACTACAA CGAGGCTCT  
 TCTCACAAGT ACGTGCCTCG AGCCATTCTG GTGGACCTGG AACCCGAAC CATGGACAGT GTCCGCTCAG GGGCCTTTGG  
 ACATCTCTTC AGGCCTGACA ATTTTCATCT TGGTCAGAGT NGGGCGGCA ACAACTGGGC CAAGGGTCAC TACACGGAGG

SEQ ID NO:1246: (Length of Sequence = 275 Nucleotides)

TTTTTTTTTT TTTTTTTTTT ATCTGACAGC AATAGATTTA TTAAGTATCC CCGAAAATAT AAACACAAAC CAGTAAAAAA  
 CAAAACCGTA AAACGTCAGG CCTGGAGCTG CAATAAGACA GAGACAGGAG CAGCTCACAC GTGGCCTAGG TGGGGAGGAC  
 GAGGCCATAA ATACTGCAGG AGGGGGGCAA GGGAGCCCTA GGGCGAGGGG AAAGCAGGGT NTGGGCAGCG AGATGGCTCC  
 GGGGGTTTAG AACTGCTGG CTTCGGCCCC GGCCG

SEQ ID NO:1247: (Length of Sequence = 384 Nucleotides)

310

GGTCTTGCCG GAGAAGTACC CCCCTCCAAC CGAAGCTTTTG GACCTGCAGC CCTTGCCCGT NCTGCTCTG AGAAACAGTG  
 CCTTTNAGAG TCTTTACCAA GATAAATTTT CTTTCTTCAA TCCCATCCAG ACCCAGGTGT TTAACACTGT ATACAACAST  
 GACGACAACG TGTTTGTGGG GGCCCCCAG GGCAGCGGGA AGACTATTG TGCAAGTTT GCCATCCTGC GAATGCTNGC  
 TGCAGAGCTC GGAGGNGGC TGTGTGTACA TCACCCCAT GGAGGCCCTG GCAGAGCAAG GTATACATGG ACTGGTACGA  
 GAAGTTNCAG GACAGNTCA ACAAGAAGT GGTACTNCTG GACAGNGAG ACCAGCACAG ACCT

SEQ ID NO:1248: (Length of Sequence = 225 Nucleotides)

AAATTGGAGA AGATAGAAGT TTGAAGTGA AACTGGAAG ACAGAAGCAC GGAAGGCGA AGAAAAGAAT AGAGAAGATA  
 GGGAAATTAG AAGATAAAAA CACTTTTA GAAGAAAAA GATAAATTTA AACCTGAAAA GTAGGAAGCA GAAGAAAAA  
 GACAAGCTAG GAAACAAAA GCTAAGGGCA AAATGTACAA ACTTAGAAGA AAATTGGAAG ATAGA

SEQ ID NO:1249: (Length of Sequence = 393 Nucleotides)

CATCTATAGT CCATACATAT CTATAATGA CAGAAATATG AGAATGAATA AGCAAAGATA CTTATGTACA CCAATAATAA  
 AGTAAGAAAG GTAAAAAAT TCATGTAATA AGAAAAATA ACAACCCAGA AATTTAAGAN TTAAGTAGTA GTCAAATCTA  
 ATTGGAATAA CTCACCTATA TAAANACAA GAGGAAGGAA ACTTTATACA TAGGTCTGGA AAATATCACA ACTATGTTCC  
 CAGAAGANTG TTTATCTCCA CAGCATCAA CTTAGTGTC TGCACACAGT TGGGACTCAG CCACTGTTGC CTGATTGATT  
 ATGAAGNCAG TCACTGTGAT CAACCAACA GTAATTGAAC GTTCATTTTT AATANGGTCA GTGTTAAATC TGT

SEQ ID NO:1250: (Length of Sequence = 391 Nucleotides)

CGTATGTATC TTINATTTAC ACTGCACACC TTGCAGCATC CTTACCTTGC AGAGTACTGA GTCTTGGCTT CATGAATTIN  
 ATGTCAAGTA AATGGGTTT AGTCATCCCT AGTTCATGTG CATGTNCCGA GAAAAGGGG AGCTTCTAAA ACATGTGCGC  
 AAACCACAGG AACAGTGCA ATCTGTGTG TCTCTATTTC CACTTACTCC TCAAGGCCCC AAGGTAGGAC GCATGTTTGG  
 TGGCTTTCTG GCTTACAAGT TCCAGTGCT ACTCCATTC CCTCAGAGT TTGCTGTGAT CACTGAGGGG AAGCAGAATG  
 GAGCATCGTG TGCTCTTAC TGGAGGACTC CTGCAGCAC CTGAAACAAC CCAATGTTGT TAGAGGCCAA T

SEQ ID NO:1251: (Length of Sequence = 320 Nucleotides)

GCCTCANAAG GTCCTTCCCA GCTTCTGCG AAAGGAAGGC ACTGCTCTN CACACCTTGT GAAACCTTTC CAGGACCTCC  
 CAGTCAGAGG CGTCTGGTT CTCACTGTCT GCAGAGCGCC CTACAGCCTG TCTGTGGGTG AGCGTGTCTG TNAACTCTTG  
 TCCATCTCTT CTGTGATCTG TGTGCTCTC GAAATAACTG ATTTTNTCTC ATACACCTTG GAATCCTGAG TCCACAGAAC  
 AGAGGCTCAT ACAAGGAAG CTTTCAAAGA GTGCTCATCG ATTTCTAGGN TTCTTGAAGA CAGGCACCAN GTTTTGTCT

SEQ ID NO:1252: (Length of Sequence = 367 Nucleotides)

CAAAAAACA AAACCAGTTA TGCAAAAACA AGAGTACAAA ATGCCCTTCT CTGAAGCTCA GTTTGAGAAA CTGATTTCGN  
 ATCTAGCTTA TTGATTATAC TCAGTTTCAA TTCTCCCTGT GCAAATAATA CATAAAGTCA TTAATGATGA TTTGATGANC  
 TGAAATCATC TTGCTTAGG ATCGTTTGAC ATCATAACCC AAATATAAAA AAGTTATTCA AGATTACAG AGATAAACA  
 GTGCCCTCGA AACATAATTC ACCCATGTAT ATATAATANT TTINGAACAT ACTTTTAA CATAAATCA CAGTCAAGGC  
 AGTGATAGCA TTGCATACTC AGTGCAATAT TTCATGTAGT GCCTTCC

SEQ ID NO:1253: (Length of Sequence = 393 Nucleotides)

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TTGCTTTCAA GACAACACTC AGTTGCTAAA CCCATTTCCT TTTCTTTAGG ATATTTTCAT TGTCICCGAA TTTTAGAGCT  
 GAAAAGTGCC TTAGAGATCA TCTAGTTCAA CCTCTCCGTT CAAATGGAGA ACCTGAGCCA CTAAGNTTCA CAGGNGAGTA  
 AGATAATTGA GCAAACAAC CCAAGTAATG ACAGAAAATT ATAGGAGAAT CAGTACAAAC TGTGAGAATT TACTATGTTG  
 TTAGCATCCT AAGTATGAGT TTAGAAAAGG TAGAAGTTAT AAGAAAAGTT AAATGTGTTT AATATGAATG GGATTCCACT  
 GTTACCTTCA NGNTAAAATG GAGACATACT TTTTNCITTA GGTATTATAG TTAAACGAAT ATTGTATCCN GTG

SEQ ID NO:1254: (Length of Sequence = 377 Nucleotides)

CAAAGCAAG GAGATGAGTT GAAAGACAGT TTTNCTTTAA GTTCATCAGTA TGGGATGTCA GCAGAACAAA AATTAAAAAG  
 ATTAATTTNC CTTTGTATCT AAAACTTCCT TAGTTTGAGC AGTAGGTGCT ACAAATTAT TTACATATCT TAGTATCATA  
 GTTAAATGTA ATGTGTTTAG GAGAGGAAAA CAAAGATAC ATTTNCTTTA AATTCATTAA GAAATTTTCA AATTCACITT  
 GTAGCCCATG CTGNATAGAA TTGGGCTGTG TTGGTACATT TGAAACACTG TTTATGTTGC TTGAAACACT TATTINTTTA  
 ATCGCCGATG TGATGATGCC TATGGCCGAG ATCANATATA GCTAGATTGG CTAGGCT

SEQ ID NO:1255: (Length of Sequence = 307 Nucleotides)

ACAAATGTTA GCTTTCTCTG GCCTAGAAAA AGAATAGGNT CATCAAGTCA TAAAACGAAG TATGINATTT CAGCACCTCC  
 ACAAATGGC TTCATCAAAG AAGAGAATCC CATCATGT TACCTCTCCT CTCTAGGTTT TCAGCTGGG GCTTTGCCTG  
 CCCCTCTACC TATGGCAGAA CCCACTGACT CGTGGNCTTT CCAGCACTTC CACTTGCTC CATTAGACAC TTAACCCGCG  
 TGNCCGCTGC CTCATGCCAG GGAGGGCCAA TCTCCAGNCA ATGCTNCTGC TGGCTGTATG ATGACTG

SEQ ID NO:1256: (Length of Sequence = 326 Nucleotides)

TTGAGAAAAC TGCAGAAGCT GGAAGGTCAA TCTCTGACCT TCTTTCCTGA GACACCTTCA TGTGACAGGT GTCCCACTTT  
 ATGCCTGGAG GGAAGGAATG ATAACACAAA GATACCAAGA AGAATGTGAA GAGACCTTTC TCAGTTCCCC CCAGTTCAAG  
 ACCATTATAT CGTACCCACT TTTGTCTAAT CANGCTTCTA TATGACTATC CATTCTTTAT CAAAACATAA CATAGAAATA  
 TACGATTATC TCAATTTCTG TCTTTGNITC TGAAGGCTCC TGTGTCACAT AAAACTTACA TTAAATAAAT TTGTATGTCT  
 CTCTTG

SEQ ID NO:1257: (Length of Sequence = 224 Nucleotides)

TTTTTTNAGA GGAATCTCA CACAGTACC CAGGCTGGAG TNCAGTGGCG TNATCTTGGT TCACTGCAAC CCTGCTCNC  
 NGGTTTCAAG CGATTCTCCT GCCTCAACCT CTCGAGTAGC TGGGACTACA GGCACCTGCC ACCATGCCCA GCTGATTTTC  
 CTGTTTINAG TAGAGACGTT GGCCAGGCTG GTCTCTTAAC TCCTGACCTC AGGTGATCTG CCGG

SEQ ID NO:1258: (Length of Sequence = 329 Nucleotides)

CAGGGGTTTC TTTCCCTACC CTTTGTGAAA ACCAATCAAT TACTAGATGA GTGGATGGAT GCAGAAAAAT CTGGGCTGAG  
 CCAAAGTCCC TTTTGGAAAT ACAAGCCATA ACAITOGAAG GACATCAGCG ACCTTGGCTT GTTTAGGTGA TTTTNCITCC  
 AGCTGCAGST AGTCTTGACA AGGAGCGTTT AANCAGAAGG CTCAGATGC ATTCTTGTG TAGGTGGGNG AGAGCACTTC  
 TAATGTTAAG TGGGGTACAG NTCAGCTGCC CCCCCAGTGA GCCTGGACAT CGTCTINTCC CCATAATCCT TNNCATCCCT  
 ACAAGGTCC

SEQ ID NO:1259: (Length of Sequence = 374 Nucleotides)

GGTCATATGT TACATGCATG TTTGTCNAAT ATGTGTATGT CAGGNCATC TTCACAAAT TNCATAGCCC CTTCTGTGAT  
 CTGTTAAATA GGTATATTTA GCCAACCTC TCAGCATAAA GCTCCTACCC CAGCTGCTCC CCCTTCCAAG TGCTGCATC

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TGCTCTTGGC TGGGAGCTCG CTTCCAGCC TGTAGGATGG CCACCTTGAA GGCTGTAAACC CTTTGAAGA AATAAAGTCT  
CCTTTTCTAA ATTTATAGAT TGTATGATTG TTTTAAGCTA ACAATAGCAA TGGCATTATC ACCTCACTTT CTGTGTGTGT  
GCTTAGCATA GTACCTGACA CATGGCACTT GAGTTGGTAG CTATTTTTTA ATAT

SEQ ID NO:1260: (Length of Sequence = 353 Nucleotides)

CTCAGTCAAA AATAGCAGCT GCTGAATTAG CATGGGCATA CCAGGCAAAT AAGCCTGCAT TGTATAGCG TTCCCTTGAT  
TGCNCTATGA AACTGAGTAA AGTTTCATTT CCTGATTCAA GAATTGCAGC TAAAATATCC TCTGGACAAA GAAGAAGGGA  
AATTTTTTGA TAACAGATGT GTTGACTCCT TACAGTATAA AGCCAATTTC TGTATATCT CACCAACAAT CTGGTITCT  
ACAGTACATC AATTTAAGT AATGTGCCAA ATCATGGCAG CAAAATATG TTCCCTCTAG CTGTTAGGGA CTTTGACTTG  
NAAAACAGGN GTTCAAATC ATCTCTTCA TTT

SEQ ID NO:1261: (Length of Sequence = 294 Nucleotides)

TTAAACAGA CAGCTAAGAT TATAGGAATA TTTAAATAA ACAGCATTTA TTTTAGACAC ATTTCAAATA GAAGCCACAA  
TAATCAAATA GATATTATCT GAAAACGTTT CAAAATATT AACCTTTAA ATGTTCTTCT CTGAAAAATT AGTTTATCTT  
TAACAAATTA TTCTGAATTA TTGTGTCAAC ATATAAGGT ATGCATATAT ATNCACTTGC TGGTCTCTAT GTTAAAGCAA  
ACTAGGTAAA AACTAGAGGA AATATCTGGA NCATAAAATG GTTAACAATT TACG

SEQ ID NO:1262: (Length of Sequence = 292 Nucleotides)

ATGATGAAGG GTTGGAGTGA TGCACTAGA AGTGAAGGAA TGCCAATGCT TGCCAGCAA GCACCAGAAA CTAGGGAGAA  
ACAAGGAAGG ATTCTNCCAC AGTTTCAGAG GGAGAATGGC CCTGCCAACA CTGTGATTTT GGACTTCTGG CCTCCAAAC  
TATGAGACAA TAAATNCCTG TTGTCTTAGA CCACCCAGTT TGTGGAATTT TMTACAGCA GAACTAGGNA ACAAATACAG  
TTTTTTTTTG CAGTAAAGAA GTTTTAAATC TGGGTTATGT CCAATGTATC AA

SEQ ID NO:1263: (Length of Sequence = 303 Nucleotides)

GGTTGAGGTT GTGGGTAGGA TGAGAAGACG ACAGGATGAA TCCTACCCC CAGCTTTAGT GGAACTCTGT GAAACACCTG  
GGAATGTGTT AGCATCAGGA GAATTCCTCT AAGGTATGAA GAATGACAAC CTGGGACCTT TCTTGTAGGT GGCTCTGAAC  
CTAACTATTC CCCAAAGATT CCCAAGTGGT AGGAAGGAGG GGGTGACAGG GGATATTAAT CATGGTCATT AAGTCTCAAA  
ACATTTCTAC TTCAAGTGAA TACATTAACC ATGCTGAGGC AGTTGAACAA CTGAATGCGT AGT

SEQ ID NO:1264: (Length of Sequence = 313 Nucleotides)

GGGACTACAT CAAGCACCTG CGGACATCT GCGAGGGCTA CGTCCGGCAG TGCCGCAAGC GCGCAGACAT GTTCAGCGAG  
GAGCAGCTGC GTACCATCTT CGGAACATC GAGGACATCT ACCGCTGCCA GAAGGCCTTC GTGAAGGCCC TGGAGCAGAG  
GTCAACCGC GAGCGCCAC ACCTGAGCGA GCTGGGTGCC TGCTTNTGG AGCATCAAGC CGACTTNCAG ATCTACTCGG  
AGTACTGCAA TAACCACCCC AACGCTGCN TNGAGCTCTC CCGGCTTACC AAGCTCAGCA AGTACGTGTA CTT

SEQ ID NO:1265: (Length of Sequence = 290 Nucleotides)

TTTCTATGTG TAAGAGAAAA TAGAGATGGG TATACATACT GTTGTTTTTT TTGAGCCGAG AAAGTGTGTG ACCGGGGCCT  
CAGGTGGTGG GCATTGGGG CTCTCTTGC AGATGCCCAT TGGCATCACC GGTGCAGCCA TTGGTGGCAG CGGGTACCG  
TCCTTTNTG TTCAACATAG GGTAGGTGGC AGCCACGGT CCAACTCGCT TGAGGCTGGG CCCTGGGCGC TCCATTTINT  
NTCCAGGAG CATNTGGTTC TTTGGCGGA CCCACGCAGC CTTGAGGATT

SEQ ID NO:1266: (Length of Sequence = 322 Nucleotides)

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CGGACAGATG TCACTCTCGC CCGAGAAGGG GGACACTGTG ATGGTGTCT TAAGCTCATA GAGTGGCAGG TTGTCTGAAA  
 TGCCACCATC CACGTAGCGC ACCCCCTGGA GGGAGGGAGG GATGAGCCCA CAGTACACGG GGATGAAACC NCTGCAGACA  
 TTGGCCTGGA TGAGCTCGTC CTTGGAGTIN AAGTGGGATA TAATGACATT NTCGCCGTCT GACACGCGGG TCAGGGAGAT  
 GCCCAGGCGC CCACTGGCAT GCTCATGCT ATCAGCAGGC AGGACCTTNA GCAGGAACT CGGGATGATC TTTTACCAGG  
 TT

SEQ ID NO:1267: (Length of Sequence = 310 Nucleotides)

GTAACCCATC CCATAGGGTT GINCTATGTA TTCTTGCCAG GTGGGGTTGG AGCACCTTGT GAGCTCAGCA GCCCAACATC  
 GATAGTAAGG GAGTCAGGGT TTCTTCATCT TCCCTAGAGT TAGAACTCAC TTCTACAGCC ACTGTGTCTAG GGACCACTTT  
 GAGCGCCCTT GGCACCTGCT GGCTGAAAT CAATTAGCT GTAATGGATC TGGCCAGCT TTTCTCTCT TGGGTCACT  
 GCACTCATAG TGGTTGAAGC AAGATCTACC AGATGGGGAC ATTGAGATG TCCCTTTCTC CTCTCATTT

SEQ ID NO:1268: (Length of Sequence = 338 Nucleotides)

GGGCTGCTCG TGAGGATGGG ACAGCATTGA CTTACTGGGG AGACTCCCTT GATGACAGCC TTACACGGTT ATTCATAAGG  
 AGGCAGGAAG AGGCGCTAAC AGTAAGCATG TTCTGGGTGG TCTTCGGGGT GCACATGTGC AGCAGCTGTA CCTGCTTGCT  
 TGTATGTTAC ATGTCTCATT AACATCTGAA ATCTCCACCC GGGAGTGTGT TTTINACTAT TATAATGAGC AAAGGTTGAG  
 TCTGAGGACA GGTAATAATCA AAAATGTGCA CCTCTTACG GGGGAAATTC CTTACTGGAG CTAGTTTGGC TTGAAGNGAA  
 CTGGACTACA GTGTGAAT

SEQ ID NO:1269: (Length of Sequence = 363 Nucleotides)

CTGCTAGAGA GTATTCAGG GTCTGCAGCA TGTGTGTAAG GCCATTAGC ATATGTTAAG GCCATTAGA GCAGTAATTA  
 TAAAGGGCC CTGCTAAAAT AAATATCAAG TTCCCTTAAG AAACCTCAAA ATTATGAAAG TTTCAGGTCA TTATTTTGCT  
 ACAATGANC TTAGCAGCTA AGNAAAATGT CTGCCTGCTT ATAACTAAA TATGGTATAA TTATATATTN CTNTATGTA  
 TTTCTAAAGC TACATTTTCA CCTAACTCT ACTACAAAGT AGTTTCGGGA AACAAAGTAA AAGCAGGGGN AATCCAACCT  
 CAAATATAAT CAAATATAT

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GATAAGTGAG ACTAATGGAA TCGTTTCCCT CTAACCTCAT AAAAAGTTTA AGGATTATCT TTCTTGAGTT CTCGTATTT  
 CTGTTTTAGA AGAAAAGAAC AAAATTTTCTG AAACAAGATT ATAGTGCTTT TNCCTAAAGTA TAAATACGTG GGCCCTATAC  
 AAACCTGGCA ATTCAATAGT CTTAAAGCAG ACATCCAAGC TATTGTGGGT GTTTGGATGA CACCATTTTC ACAGTAGGAA  
 ATCATTTTAT TCTGAGCGTG GGAATCGGCA TTGGTTAACG CATGAGGTTT TATGTGGTAT AAACACCTGG GAAGTGAGAG  
 AAAAGNCAGC ACAGAAGCTC TGTGGGAGCT CTTCTGAGCA TTG

SEQ ID NO:1271: (Length of Sequence = 335 Nucleotides)

ATGCCCTCTGG CTGTGTTGAC TGCAAAAGGT GATGTGCAGG GGTAGAGGTA GGGTACTAAT TTACAGTCAC CAAAATTAGT  
 ACTGATATTA ATCAGTTTATG TTGGATTAG ATGAACAATG TTAAATGCTT TAAGGTCAT TTTTGGCCCC AACAGGACTG  
 TGCTATATTA AATGACACCG TGCCCAAAG CTCAAAAATT ACATAGAAAG TAAAGTACTT CTTGAATACT AAAACAGTTA  
 AGCATAAAAG GTGTGAATT GGTCCCAAAG TGATATTAC TTAAACATTT AATCCTACGN NCTATCTTAG CTGTACCTC  
 TAAAAATGCT TAGGA

SEQ ID NO:1272: (Length of Sequence = 323 Nucleotides)

314

GTTTATAGATA TTTTAAGATA TTAACTGTC CCTGTGGCT TTAAAGGAAA AAATAAGTAT AAATNCTTGA ATATTAAGAN  
 TTTTAAATCA GCTAAATTCA GGGCCAAGAA CTATTTAAGA TGATTCANTG AGAAAGAAAA GGACCTAACC TGGAAAAAGA  
 GTTTCAAATA TGCCAGTACG TAGGGTATTT NIGGAAATAC ACAGTCTAAA ATTAAAAATT NNAACTNATC AATGGAAATT  
 AAATCTATAG CACTTTAAGG CTGTGAGCC CAACANTAGG GGNTACTTTG GGGGCACATG ATCTTTCAA ACATAAATTA  
 GGG

SEQ ID NO:1273: (Length of Sequence = 368 Nucleotides)

GCAGCCTGGG CAACAAAGCG AAACCCTGAC TCAAAZAAAA AAAAAAAAAA AAAGTCTCTT AATCACAACA GCAAAGCTCC  
 AAAAGTTCAA GCATCACAGG TAGCTAGTGG CTACTATATA GGNCAGCACA GACACAGAAC GTTCCAACA TCACACACAG  
 TTCTANEGGG TAGCAATGAC CTATACTGCT GACCATGCTG NCCAACATGT NTGCAGCAGT CCCTCATCCC TCTGTNGTCC  
 CCTGTTACAA GCTTAGANCC CCCTCCNNAC GCTCCTCCCC CATAAACAGG GCAAGTNGGG CAGAAGGTGG AATCCTTTTC  
 AGGGGGCAAA T

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GCAATGGGAT CTGGAGCCAA AGAAAAATAT ATCTGAGTTC TAGCTCCTCA CTAAGTAACT GTGTGATAAT GGGTATGTCA  
 CTCACCCTCT TTCAGCTTTG GGTCTTTTAT GTGTAAAAGG GAAAAACATA TGCCTACATC ATAAGGCAGA TGTGAACATC  
 AAATGTTATC AGTAACTGTC AATCTGTTTT ATTAATTGTA GAATGTCCAA AATATTAGTT TGTATGGACT TCAATGAGTA  
 TGTMTTGTGG AGTGGAGTGG GGGAAAGGGA TCATTGCTTA CCCTCTGCAC ATATCATGTT TCAGCCTAGT ACAAGGCAGC  
 CATGAGCACA AAGGGCTAAG CTACTTAAAT CAGNCCCCAA ACAACTTC

SEQ ID NO:1275: (Length of Sequence = 319 Nucleotides)

AGATTACTCT TTGCAGAAAT TTGGTTAATT GTGAAGCTGA AATATCCTGA CTCTACCTCA AAGTTAATGT TTTAGGTAAC  
 TGAACAGGTA TTCTNCCCAT TACTAGTATT GAAGTCAGAA TACAGAAACA AATAGTTACT GCCAGAAGCA GAATGGAAGA  
 GCCAAAAAGT ACACAAAATG GACGCCATAA ATNCTGAAAT AAAAGTGTAT GATGTGTTCT GAGTCACGTG AGAAGTCATG  
 CATTTATTAT CAAGATAGAA AAGAGCAGAG AATGACGTGG GACATTGGTC CTCGGAGGCG TTGTTANGTG GTTCGGTCC

SEQ ID NO:1276: (Length of Sequence = 324 Nucleotides)

CTGCATTGGG CAGGACAAAA CCTGCCAGAT TCAGAAGGTC ACGANTCATC TGGCCTTTAA TGCTGATATC CAGTGGAGAG  
 CTGGAGTGA GGGTTGGGGA AATATTGACT TCCAGGACCC AGGGCTTGAG GTTTTCNTCT AGCATGATGT CAAAACCAAA  
 GAGTTCATGG CAGCTATAGG GCCGTGCGAC ATACATCTTG AGCAGGCTGG TCACATAGGG CTCTGACGAG ATGATAGTTT  
 TGACAACAAC ATCCTTTATC TTCTCCAGA TGGGTGCGCT ATTGATTNCC CTTCTGGGCT CAGGTAGTTC CACAAAAGCC  
 TTCA

SEQ ID NO:1277: (Length of Sequence = 388 Nucleotides)

AGCAAGGCGG TGGGTAAGT NTGGACCTTT GTGTACCAGA GAGAACATCA TGGTGGCTTT CAAAGGGGTC TGGACTCAAG  
 CTTTCTGGAA AGCAGTCACA GCGGAATTTT TGGCCATGCT TATTTTININ CTCTCAGCC TGGGATCCAC CATCAACTGG  
 GGTGGAACAG AAAAGCCTTT ACCGGTGCAC ATGTTTCINA TCTCCCTTTG CTTTGGACTC AGCATTGCAA CCATGGTGCA  
 GTGCTTTGGC CATATCAGCG GTGGCCACAT CAACCCTGCA GTGACTTTGG CCATGGTGTG CACCAGGAAG ATCAGCATCG  
 CCAAGTCTGT CTCTACATC GCAGCCCACT GCCTGGGGGC CATCATTTNG AGCAGGAATC CTCTATCT

SEQ ID NO:1278: (Length of Sequence = 354 Nucleotides)



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GGACTTGTAC CCTGGGTGGT GAGAAGACCC TGATTGGTTT TATTAGTGCA TTCTGTAAAG TNACTGGGAT AATCATGTTT  
 AGTTTCAGCAT TTTATGTGAG TTTCTGAAAG CNCTTTAATC AACTCCATAG ACAAGATTAT AGTGTTCAC AGCAATAGGC  
 ATGGGCCATG TCTGCACTGG AGGTAAGTTG CAAGGTACAC CCACGGGTGA TTTATCACTC TTACAAAGAT GATAACTAAT  
 GAAGACCGCA TCTAGAATGC TCTTACTGGA GATGGTTTAC AGAGCATTTT TAATCATCAT ACTTAGATT ATATTAAATAT  
 TTCTTTTCAA ACTAAATTAT TCCAACTGT GCCC

SEQ ID NO:1279: (Length of Sequence = 347 Nucleotides)

CCACTTCAGT GCTTCTGTGT CCGAAAAGA TCTTTTGACG CATAGGGCCT AACTGTAATA CACTTAAAGG ATAAGTCTCC  
 ACCCAAGGT GAACATGGGT CATGTGTAC ACGCACATTA GTTCATTATC CATGTGTGAG GACCTCCITT GTGAACAGTC  
 ACAGCTCCTC CTATAACCTG TTAAATATGT ATGTTTGATC AACCCATTCA ACTTAAATNC TTGCTTACC TCTCCTTCCC  
 TCAAAGTGCC TGGCTATACT TCCCAGCCTG CGGGATGGCC ACCTTGCCAGG ATGSAACCCT TTGTAAGAAA TAAAGTCTCC  
 TTCCAAATG TACACATTGT ATGACTT

SEQ ID NO:1280: (Length of Sequence = 344 Nucleotides)

ATCCITAGCA TGCCTGINTT ACTGAGACCA TAACTTTTT TTTTTCCCTT CTGCCCTTAC CCAGTGTGTG TTAAGTCTTG  
 CTGTTAAGC TCCCACACTT AAATGGCTGC TTGCAGAATT GCAAAGGGAC TAGGGAGAGA ACAAAAACAG ATATGCAGGT  
 GGTTGTTTGT AACCAGACAG GATTTCTAAG GAGGGTTCAG GCAGTCAAGT GGTTTNTGT ATGINTTTTA TGTTCATAGT  
 TTGAGTTTT ACAATGTGTG AAGCTTACTT TTGCTAGCAT TAGGTATAGT TTATTTTGAA AGAATGAGGC TCTGAAAT  
 AAACATGCCC AGTAACTAT ATCT

SEQ ID NO:1281: (Length of Sequence = 331 Nucleotides)

TGAGGAACAT AAAATGGCTT GGTAAAAGTA ATAAATCAG TACAATCACT AACTTTCCTT TGTACATAAT ATTTTGCAGT  
 ATAGATGAAT ATTACTAATC AGTTTGATT TNCACAGAGG GTGCTGCTCT TTAATGAAA TGAAAATTAT AGCTAATGTT  
 TTTCCCTCAA ACTCTGCTTT CIGTAACCAA TCAGTGTMTT AATGTTTGTG TGINCTTCAT AAAATTTAA TACAATTGNN  
 TATTCTGTTT CCAATGTTAG TATGTATGTA AACATGNTAG TACAGCCATT TTTTTCATAT GTGGAGTAAA AATAAAATTA  
 GTATTTTAA A

SEQ ID NO:1282: (Length of Sequence = 310 Nucleotides)

CCATGTCAAA TGTAGTTTAC AAAGGGAAAG GACAAGTACC TTNTATAGA ATATACAGAC ACAGCATCAC ACCACAGGGC  
 CCACGGGAGG GTCGGGGAGA CGACACTTTT TCCCTGGGAA AGGCAGCTCT AATCCAGGA ATGTTTCTCN GCAGAGGCTG  
 GGTGGCCAGG AGCACTGTCC TCTAGCCCC TAACTCAGCC TCTGCTTCAN CTGGTTCCC ATTTCTTCCC TCTACCCCC  
 AACTCCTTAT AAAGAGCCCC ATGAGCTAAG ACTAAGGAGA GGTTCATNTC CCTTGGGGCG TGTGCCCCAT

SEQ ID NO:1283: (Length of Sequence = 323 Nucleotides)

ATGAGGATTA ATTATATCTG TNCACCCAC ACAGTCCCC CATACCCATA ATCTTTATTT ATTTNCTTCG TTTCTTCCCT  
 ATACCTTGT TCAGGCATTA AACCATAACC TGTTATTTAT NCTATCCTTT TCAAAACAGG TGTGGACCAT GCACAGATGA  
 CCTATGACGG GCAGCACTGG CACGCCACGG AAGCTTGCTT TNNITGTGCC CAGTGTAAAG CCTCTTTNTT GGGATGTCCC  
 TTCCTTCCCA AACAGGGTCA GATTTACTGC TCAAAAACGT GCAGTCTTTG GGTGAAGACG TCCATGGCCT CTGAATCTT  
 CCG

SEQ ID NO:1284: (Length of Sequence = 283 Nucleotides)

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TTTTTTCACA AGGTGAAAGA CCTTTATGGA CATGACAGAG AGGACCTGAG TTAAGAGGGA AAATACATCT NCATAGCTAG  
 GTTCACATTC AGTTATGTTA GTCCCAAACC TACAAATTCA ACATGATCCC TATTAAAAATC CTACCAATAT AGTTCAAAAG  
 CTTGACAAGT TGATTGTINAC ATTTATATGA GAGANTAATT AAAAAAAAAA AAAATAGGSC CAGGTGCAGT GGCTCACGCC  
 TGTATCCCA GCACTTTAGG AGGCCAAGGC GGACAGATCA CTT

SEQ ID NO:1285: (Length of Sequence = 341 Nucleotides)

CATTCTNATG ATGTAGAGGC CAAAATGGTA TTTNATAAAG AGGAAATTAC TTCTGANCCA CCCAGCTGG AAACACTGGT  
 AGTATCGGCA GCAGATGTGA TTACATCCGT TTTGGTATTA CACATCGTAT TTACAGCAGA CATGACTGAN CTGGGAACAC  
 TGCCCTGTGA GACAGCCTGA AAGTTTTTIN CAGATTTTNT GTGAACACTG TCTGAATTCA CATTGGCAA AATGATTCTN  
 CCAGTTTCTC CGGCTTCTGC TAGTTTGAGG CAATCTGTTT TATGTGCCCC AGCTGAAGAT CTTTCACTAA CTCGATCTTT  
 AGAAGCTAAC TGCATTGCTG G

SEQ ID NO:1286: (Length of Sequence = 354 Nucleotides)

GCCCTATTG TACAAAGTGT GCATGTNAGC GTGCGTGTGT GTNTTGCAAT TTTCCCCCTT TAGGTGGTTC AAATTGGA  
 TTTGTGAAGG CAGAGCTGAT AATTAGAGAC AATAAAAAATC TGCAGAGTAG ATGGTTCCAC AAACAAGACT ATGAAAGAGG  
 GGATAAAGA AGAGGTCAAG AAAGACTCAA GAACAGTATA TAGAAATAAT TCAATTACAT TATGTGTATT TTAAGAAAA  
 CATGTTCAA CTGCATGAGA CAGAAATAG CACTCNGTTA TCCTCCTAGA CTTCTNAAAG TTTTGAGTTT GTCTGCAATC  
 TTTTCCATT AATCGNCTTT TGCCATCTTC AGAA

SEQ ID NO:1287: (Length of Sequence = 354 Nucleotides)

CTCTCTCACC CGGTGGCCTA TAGCCCCCA CGTGGTCAGC AGCTGCCTCA GCCATCCCAG CAGCCTGGTT TACAGCCCAT  
 GATGCCATAAC CAGCAGCAGG CGGCTTACCA AGGCATGATT GGGGTCCAGC AGCCACAGAA CCAGGGCCTG CTCAGCAGCC  
 AGAGGAGTAC CATGGGGGGC CAGATGCAAG GTTGTGGTGT TCAGTACACT CCACTGCCTT CTTACCAAGT TCCAGTGGT  
 AGTGACTCGC AAAATGTGGT CCAGCCGCTT TTTAGCAAC CCATCTGGT CCCTGTGAGC CAGTNTGTGC AAGGAGGCCT  
 NCCAGCAGCG GGGGTACCA GTTACTATA GCAT

SEQ ID NO:1288: (Length of Sequence = 231 Nucleotides)

TTTACTAAT TGGTATAGAT TGAGNTCAT GCATCANCA GCACTTTTGA AATTNTCCCC AAGTGATTCT NACCTGCAGC  
 CTGGGTAAAG AGTCGCAGGG CTCCTGGATA GTCATTAAGT GAACTGTGGT AAGCACTGAT GTAGCAGGAT TACCTGCCCT  
 ACTAGGTGCC GGAACATGCAT TTNCTTGCTC ACAAGTAATT TTTTAAATG TATGCTCGCA TCCCTGCCTT G

SEQ ID NO:1289: (Length of Sequence = 329 Nucleotides)

GSACACTGTG AGGGGAAAGG ACAATTTTAA AATTCCTTTT CAAGGAAAAA AAAGGTCTTT ATGCTTTGCC ATGAGGCCAC  
 ATTCACTGTC TATTTAANCT TAATATCTTG AACCTAAAGA ATGCTGACTT TNCCTACATT TCCAGAGTTA GGCAGTATTC  
 TACACTTAAA GACTACTACT ATTTTINATAA AAGGTAATCT ATTCAAATTT CTTACAGAT TTCCCTTGCT GGGGATCAGT  
 TAGTAAAGAA GGAGGAATTC CTCTTACCCA AGAGGAATTG CATTGCTTTA ATTTAGCAAT GTGAGGTAAG GCCTGCCNAG  
 TGCCACAGG

SEQ ID NO:1290: (Length of Sequence = 297 Nucleotides)

GGAGGCACAT GTGCAGCTTT GTTTCATGGG TAAATTGCAT GTTTCCTGGG CTAATGTGGT TTCTTTTACA GAAAAAGTA  
 TCAGAAATAA TCGGTTAACT TTNCTACAT GGTCTTAACT CTTCTTCAGG AAATATCTAA CTTGTAAGTG CAATCCTTCT

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TGTATAGCTG CCAGACCAGA CCCAGATAGA CCATAATAAA ATAAAATACA CAGTCAGTTT TTAATGCAAG CCAGAATGAC  
TCINCTGIAT CTTTAGCCTT TCCAGGGGGA TACAGTGAAC TCAGATATCC CTGCTTA

SEQ ID NO:1291: (Length of Sequence = 317 Nucleotides)

CTATAATCCC AGAAGCTTGG GAGGCCGAGG TGGGCGGTTC ACCTGAGGTC AGGAGTTGAG ACCAGTCTGG CCAACATGAT  
GGAACCCCAT CTNTACAAA ATAAAAGCA AGATATGCAA AATAATGTGC CAGTNTGGTG CCGTATACCT TTAGTCCCAG  
TTACTAAGGA AGCAGGGTGT CTNAAACAGA AGAATCACCT GAGCCCAGGG AGGTGAGGC TGGCTAAAA TAGATCTGGG  
GGTAGTGGTT AATNGGGCCT TGTGAATNAT TCAGCATAAG GAACTGTCCA ATATTTTTTT AAGCTGTCAG AAAATCC

SEQ ID NO:1292: (Length of Sequence = 293 Nucleotides)

GAAGATGGAA ATAGACCACC ATACAAAACA AAAAAGACAG AAGAGAATAT TAGCACTCTG TTGCAAAGGA GAATAGGTAT  
GCTCAACTGG TAAGTAGAAT GCAAATATTC CAATATCTGA AAAAAATCCC AAATCCAAAA TACTTCTGGT TCCATGCATT  
TTINCTAAGG GATACTCAAC AGGTATTTTA AAAGATCAAA ATACAGATCA GAGAATATGG ATACTTGAAG ATTATGAGCA  
AACGAGGATT AAGGNAACA TGTTGGAGGA CTTTTTAAAA ATGTGTTAAA GGG

SEQ ID NO:1293: (Length of Sequence = 310 Nucleotides)

TCCCAGAAAC ATTACGGTTT GATATCAAGT TCCTATTTTA AGAGTCACCC ATTTGCCAC CATAAGTNC TGGAGAAGGT  
AGGGIATTAC AGGACTAACC TTCCAGTGGC TGATTCTGGT GGTTCACACA TTCAGGTTTC TCTGATTTIN ACAAGCTTTT  
TCCCATAAAG ACTGCATTIN CTTTAAAGC TTCTCCTGCA AAANAGCCAT AAATTGAAGC ACCAGTGAAG ACAATAAGT  
AACATACAGA CGTTTCATT GGGAGGGGGC CCNGAATGNG AGACAAATAA GTCCCTAGTA AATGGCATT

SEQ ID NO:1294: (Length of Sequence = 275 Nucleotides)

GAATGACGAT GTCAGGGGCA TCAGGAAAGG TAAGGGCCGG GAAACCGGGC CCTTGGAGAA CCTGCCCCAG GGGAGGCCA  
GCCTACTCAC AGGNTCCGAC ACTCCAGGCA GAGCAGAGGG CAGGAGAGGC CCAAGAGCT AGGTCAAGCA GCTGGCTCCC  
CTGGGGTTAA ATACATGGGT TTTTGTTTAA CTGCTGTGCT TGATATACAT GAAGTAATGA ATACCAAGCA ATTCATTTTT  
CCTGCATCTT TACTTTTACA TTTGINCTTA GGTTCCTAA AACATTINAA ATACAATAAA ATGAGTGTAG CAAAAATTAT  
TGAAGCT

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CAACCTCTGC CTCCGAGTT CAAGCGATT TCCTGCCTCC CGAGTAGGTG GGATTACAGG CATGATCCAT CACGCCAAC  
TAATTTTTTA TTTTLAGTAG AGATGGGGT TCTCGTGTG GTTCAGGCTG GTCTGAGCT CTGACCTCA GGTGATTCAC  
CCACCTCGGC CTCCCAAAGT NTTGGGATTA CAGGTGTGAG CCACGCGCC AGGCTACTGG TCTCAATTCT TTTGGATACC  
CAGAAGCAGA AATGCTGGGA TCACATGGTA GTCTC

SEQ ID NO:1296: (Length of Sequence = 247 Nucleotides)

GGAAGGAACA ATTGATAAGA ACCGGGGACA TCAGGGAGAG AGAGTATTTG AGCTGGGCTT GATTCCATCG GGTAGTATCT  
GGAAAAAAA AAAAAATCC CAGATGAAAG AATGTACAA GACATGAGCA TGCAGGGCAC ACTTTGGAAA ATGGGNGAAG  
TCTGACAGGC CTGGGAGAAT GAAGACAAGT TAGCACCAGN TTNAGAAGGC CTTGATTACA NGGCCAAAAC TTTTGGATTT  
TACACTA

SEQ ID NO:1297: (Length of Sequence = 246 Nucleotides)

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GACTTCCTAC AATGCAGCAG CAAGAGAAAA TNAGGAAGAA GCAAAAGCAG AAACCCCCAG TAAACCCATC AGACTTCGTG  
 AGACTTATTC ACTATCACTA GAATAGCATG GGAAAGACCA GCCCCCATAG GTCCACTACC TCTCCCTGGG TCCCTCCCAA  
 AACATGTGGG AATTATGGGA GATACAATTC AAGTTAAGAT TTGAATGGGG ACACAGTCAA ACCATATCAT TCTGCCCTTG  
 GCCCCCT

SEQ ID NO:1298: (Length of Sequence = 263 Nucleotides)

CATTGCACTC CAGCCTGGGC AACAGAGCA AAACCTCCATA TCAAAAAAAA AAAAAAAAAA GAATTGCTGA CCTTTATGTG  
 TTTCTGTTTA AGTTCACAAC AGTCATAATT CTGTAAAATA CAAGGCAGAA CTGTAGTTTC TGATACTAGT AATATATCTA  
 ANTCACTAAG TAAAAAGGAT GTGTAAAATC TTAATAGGGG AAATAATTAT TGTATGANCA AGCAATTTC AATCAAAAG  
 NCACGTTTCA GTATATATTA TAG

SEQ ID NO:1299: (Length of Sequence = 272 Nucleotides)

ATCINATTGT TGTTAGTTT ATGGCAGTGG TCTCCAGACT TTTTGGCACT AGGGACCACT TTAATGGGAG ATAATTTTCC  
 CATGGACGAG GGGATGGGGA GGAGGCAGGG GTGGTTTCTG GATGAAACTN TTCCACCTCA GAAGATCATC AGGCATTAGT  
 TTCTCATAAG GAGGCAGAAC CTAGATCCCT TGCATGCACA GTTCACAATG GCACTCGTCC CATATNCCGT CGACAACCCCT  
 TTTTGTAGGT TCCATGCTTC CCATTGGCT TT

SEQ ID NO:1300: (Length of Sequence = 277 Nucleotides)

ACCACTGCAC TCCAGCCTGG GTGACAAGAG TAAACTCCA TCTTAAAAA AATGTGTAAA ATGAAGATTA TCATACTACC  
 TACATCATAG AATTGTTTTT AGTGTAAAAT GTGTGTGTGT ACATTTATGT AATAGTTAAC ATTTAAAGAG CACCTACTTT  
 GTGTAAACAT ACTTTGTATG AGATACTGTT CAAATATATA TNCTAATATA TGCAACATAT TATATATGTN AGAATAGGGT  
 CTTATATATC TTAGGAAGTT AGATCTTATA TGTTTGA

SEQ ID NO:1301: (Length of Sequence = 304 Nucleotides)

GGTTGCGGGT TATGTAAATC CCAACTTAT GAACAGGAAA TGTGTACAGT GCATGATAGG TTAAATTTTN CTTTATTGTT  
 GTCCAACGCA GGTCTTTTGG AGAGAAAAA AGATCACAAT GCTGACCAGG TAACTCAATA GGTTAAGTCA AGGTAACCAT  
 TGAAAGATAA TAGGATTAGG GAGGTGTTA TTTTATGGCA TCTTCTCTCA TGGAGTTCTT AGCACTTCGG ACAATTTGTC  
 TTTTCCCCAC TTTGTACAGC TGTTATGTGT CATTCAACAG CCGGCTGTAT TTAACCTGCC TACT

SEQ ID NO:1302: (Length of Sequence = 335 Nucleotides)

AGTTTATTGC CATAAGAAA ACAATTTATA AAATAATATG GTAGACTTCT ACTTCAACAT ATTCAAGTAA AAACATCACA  
 GTGCAAGAAA GTGATCACA TTAAGCATGA AGACATCAA AGCCAGCCAG TATTTTAACT ACAGAGCAGA ATATTCTTGC  
 TGTCCTTCC TAGAAAATGT TGGCATTTC ATTAACGTCT CAGGTACAA AAATCACTTC GTGTCCACTT CCGTCCCTTC  
 AATATATTIN CATACTACA CTGTGTACA TTAATGCTGG TGGACAAAT AGCTCCTATA AAATCTAAA ACCTTTTCAG  
 GTGGGCACAA TGGTT

SEQ ID NO:1303: (Length of Sequence = 316 Nucleotides)

TGGAGCTGTA TATGGTCCGG AGTTATATGC AGCATCCAGC TTTCAAGCAG ATGTTNCCCT AGGCAATGAT GCAGCAGTGC  
 CCTATCAGG AAGAGGGGGT ATCAACACTT ACATTCCTTT AATCATTCTT GGCTTCCCTT ACCCTACTGC AGCCACCAGG  
 GCAGCCGCTT TCAGAGGAGC CCATTINAGG GGCAGAGGSC GGACAGTATA TGGTGCAGTC CGAGCGGTAC CTCCAACAGC  
 CATCCCCGCC TATCCAGGTG TGGTTTACCA GGGACGGATT TTACGGTTGN TGACCTCTAT ATAGATTCTG CAAACT

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SEQ ID NO:1304: (Length of Sequence = 211 Nucleotides)

TATTTTTCNC TTCTTCTCTC CCTACATATA TTCTAAACCT TCFAAAGTTT TTTNATTTTT TTAAGGATCA CTTTATCATA  
 AAATAAAATA TCCTTTTCAT ATAATAAATT ACCTAATAAA AAGTCTTTTT TTTTCATATT AGCCCAGGTN CTTTGCTACA  
 TTTATATGGT AATAAACGCC TTTATTAAAA TAGANTATTA AATTATAAG A

SEQ ID NO:1305: (Length of Sequence = 316 Nucleotides)

GAAATGATTG AGGGAAAAA ATTTATAGTA CGTTTTCAAC TTTTTTTTTT TTTCTTTGAA ATGGAGTATG GTCATAAAAA  
 GGACACTAAA TAACCTGATT AAGCTAGAGT ATAGACCAAA TTGCCACTTA CTTTGAATTG TTTTACCAA AGGTATCACT  
 TTGAATAAAG ATAACITTTCA TTAGACATCT ATCTTTATGT GTTCTGCCA TCATTTTCAGT GAGATCAGAG GAAAGTTAAA  
 TTAGGAACAA TGAAAAAGCT TAAGAAATGA ACAATCATCA TGCTTTTGIG TATGCTTAAA GTGAGTACAT GTAAAA

SEQ ID NO:1306: (Length of Sequence = 310 Nucleotides)

GGGGATTTTT GAAGGCTTCG CTGTGGATGG CCGAGAACCT GCTCGGGGTG TAGGTCTGTG TGTCTGGGGG ACAGTTTCCA  
 CATCTGAGCA CACGGACTGG ATTTCTGAAA TGTCAAAGTC TGATGCATCA CTGCCTCGGC GGCTGCTGGC CTTNCTGCCA  
 GCTTGTCTTC CAGCTCGACT TCCTGGTCCG CTGGGAGTCT TCTTGGAAATC AGCAAATGT GTTCGGACTC TGGCAGNTGC  
 AGTGTATATC AAGCCACTGT CCTCCCCANA GTGGAAGCCT TTCCCTGATA AAAATCCTGG AAGTCGAAGC

SEQ ID NO:1307: (Length of Sequence = 302 Nucleotides)

TAATAAATAG TATATGTAGT GAAGAAAAAG TTATAACAAG TATACATTAC ATTTAACACA CCTAGCACAT AGGACACCCCT  
 CAACAAACAG CTACAGCTGC TGTAATCAT GTGTATATAA TATAACATGC AAGCATATCT TCATGTATTG ATTAATTACT  
 ACTTCTTGA AAAGGATCTG AGGAACATAT TTAATATATT TNATATGCCT GCTCATATGT NCATTTAGTG CTTATCAATT  
 ATATTTAGTG CTTTCTIATT AGCTTCATCC ATTTGATTAA GATAGCAACT TGTATTATTT AA

SEQ ID NO:1308: (Length of Sequence = 285 Nucleotides)

CGCCGGCCAA CGTGGTCTTC CTCTACATGC TCTGCAGGGA TGTTATCTCC TCCGAGGTGG GCTCGGNTCA CGAGCTCCAG  
 GCGTCTCTGC TGACATGCCT GTACCTNTCC TACTCCTACA TGGGCAACGA GATCTCCTAC CGCTCAAGC CCTTCTCTGT  
 GGAGAGCTGC AAGGAGGCCT TTTNGGACCN TTGCCTCTCT GTCATCAACC TCATGAGCTC AAAGATGCTG CAGATAAATG  
 CCGACCCACA CTACTTCACA CAGGTCTTCT CCGACCTGAA GAACG

SEQ ID NO:1309: (Length of Sequence = 319 Nucleotides)

TTTCCAATTA TTATTTTGCC AATATCCTCA ACTCTTTTGC CCACITTNAT CTTCATTCA ACCCTCCCTG CAAAATCCTG  
 ATCTAAAAGC AACCCAAGTA TTTGCCCTCT CAACCTCCCA GCTGCTGAGT GGTMTTGGGA ATTACACAAC CACTAAGCTT  
 GGTGCAGATG CACTATGGCC TCAATAGAGT CCCCAGTGC TGCCCACTTT CTCTTCCAT ATTTCTCCAC AGCAGCTGGT  
 CAAAATACAT TTNTCCCCAA ATGTCTTACA CAACCCCTT CTCTCTATC ATCTTANCT CACCCCCACC CCAGTTCTT

SEQ ID NO:1310: (Length of Sequence = 356 Nucleotides)

TGAAGTTTTC CTCTTGTGCG CCAGTCTGGA GGGCAATGTG CGATTTCAGC TCACTGCAAC CTCTGCCTCC CGGGTTCCAG  
 CGATTCTCCT GCCTCAGTAT CCAAGTAGC TGGGATAATA GGCACITGCA ACCATGCCCA GCTAATTTTT GTAGTTTTAG  
 CAGAGACGGG GTTTCACCGT GTTGGTCAGG CTGGTCTTGA ATTCTGACC TCGTGATCTG CCGGCCTCGG CCTCCCCAAA  
 TGCTGGGATC ACAGGCATGA GCCACCGCAC CTGGCCCTAT ATCTGCTTC CTATCTCGTG GGTATGGTG TATGGCTTTT  
 ATTTATTTCA ACCTGCAGTT GTTTCAGAA CATCTG

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SEQ ID NO:1311: (Length of Sequence = 331 Nucleotides)

AGCTCAGATT CATGCTTGA GCCAAACAAG TGAATGTATC TNAGAAGACT CAGTACCACA TGGTACTGGG AGATCTTACT  
 CACTTCAGCT GGGGTGCTC ATTAGTGAAT GTATGACAGC AGGATGTGAG GGGATGCCCA GGAGTCACTG TTAGCATTGT  
 CATCTGAGAT CACTGCTATT AATATCATC ATTAAATTTAT TAGTGAGCTT CACTATATGC AGACTGGGAG ATAAGGAGAA  
 AATCTGTAC ATTCTCTCTA GCTAATCAGA TCAGCTACCA ATTAATGAGA TTCTGAATGA AATATCAATA TGIGTTTTTC  
 TAATTTGGAC C

SEQ ID NO:1312: (Length of Sequence = 347 Nucleotides)

TTTTTTCCTT TATAAATTAC CCAGCTTCAG ATTTTTTNAT AGCAATGCAA AAATGGCCTA ATACACTTCA GAACCTGGAA  
 GATTAGCAGT GAGAAATAAA ATCAGTTAAG TTGATGACTT CTAGTATTTT ACTACATGGT TGTTTTGCCA AAATGAAGGC  
 AATATCAGTG TCTTCACACT TAAAAAGTAG TATATTGANC TTGAGGTGA AAGAGCTGGG GTTTAAATTT GTNCTTTACC  
 AATTATTGAG ATAAGTGTCC TTGAGCAAGT TACTTGCTTT CNCTGATCTT TAGTTTTCTT ATTTGTGAAA TTGGAAATGG  
 TGGTGTTTCA GAGGGGGGT GTATATA

SEQ ID NO:1313: (Length of Sequence = 336 Nucleotides)

GAATTCCTCT ATCAAAGTG TCATAAAACC TGGAGCTGCA GCTGGCCCCC ATTAGGTAGT TTCTTGGTGA ACGTTTTCCA  
 AGGAAACTT TTTTTTAAAC ACTTCATAAA GCAAGCACA AAAGGACATT GCAATGACTG GCTGAAAGAC ATGGGACTTT  
 TTGCTTCGA CGACTAAAC GTTAAATGGG GGCTTACTTT GTGCATTAT GGAAGAAAAC TTGGAAGGCA TTAAGGCTA  
 CATTTTGAGC CTTCATGAT TTCATTATT TATGCATGAA TTCATTGTT CAACATTTAT TTAGTACCCA CTATATGCCA  
 GGCATGTGC CAAATG

SEQ ID NO:1314: (Length of Sequence = 391 Nucleotides)

CGGTTTAGA CCTCAGTCGG CGCTGTGAGG GCACTGTCCG CCCACCTGCT CGGCTGGCTG AGCTAGGTCA GTGGAGAGAA  
 GCTGGGGCCA CTCACACAGC ACAGCAGGCC ACAGTCTACA GAGTACGCCA GGTAGAGCGG TTAGAGTGGC AGCCGCTGGA  
 GAAAGGGTTA TAGAAACACA TCCTGACTC TTGGTTATG TCCACGTCC TCTGTCTCTC CTTCCCTTC CTTACTCTCC  
 TTCTTTCTG CCTCTGTG TCCTTGGAA GTCCCTGTTG TCAGTGCATT TNAGTGCATT GACGTGTCCT AAACACTGAT  
 CTNCACACAC CTTCTTTAT CTCCACCTG ATAGGCAGGC CCCAGANCC CTTTTTCT AGCTTTGTT C

SEQ ID NO:1315: (Length of Sequence = 374 Nucleotides)

GAATTCCTCT GAACACTGGT GTTACAGAG AGAGATACTT TGTGGAATGG AGCTTACATG ATGAATGAAA AAGAGACCGT  
 TAAAAAGTAC TAGCCGTTGT TTACAAATAA CTACCAGGTA AACAAAGAAA TCATTTCCTT TCCCCCTTCT AAGGATAAGG  
 GAGAATAAAA TAATCACCAG GAGGCATGGA GTTGTAAAAG TATATAACAG ATTTCTTTAT TATTATTTAC AATCAAGTTC  
 TGTGTGNCAG CATAATGAAA TAAATAAAG ATGTGCCCTG GCCTGTGAAT TTCAACTCTC CTTGACTTAA GTTCTCTGAA  
 GGGCAAATTG GAAAGCGGTG ATCAGGCAGG GAAGAGAGGG CAGGTGGAGG CCAG

SEQ ID NO:1316: (Length of Sequence = 353 Nucleotides)

CITGTTTACA GGTTTTGAAA GGTGTGAG ATTAGTATTT ACTTTTAATT TTTTGAGTAA TAGAATGCGT TTAGGTTCTA  
 AATTACTATG GAAATGGCAT AGTGAGGATT CTNCACAGAT ATTAGAGACC TTCAACAACA TAGTGAAAAT AGATTGTGCC  
 TTTCTGTGAA ATAGCTGAAC TATGAAAATT TGANCTGTCA CTGGAGGGGG CATTTGCTCT GAAGTTTGCC AAAGTAAAAA  
 TAACATTNCT CTTAGTAAG AAAAAGCTAT ATTTTNCAT ACTGCCTGCC ACAGCAAACA AACAAAGTCT TGTGTGTGTT  
 TTAATATTGG CAAAGGAAAA ATTCTCTATA TAA

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SEQ ID NO:1317: (Length of Sequence = 316 Nucleotides)

GAATTCGGAT TATAAGCATC AATATGCATA AAATGCTTAG AGATGGACCT GATATATAGC AAACACTCAG TAAATGTTAA  
 CTATTATTAT NACAGCACAG CAATTTATTT AAGATTACTG AGTGTTCAAA TGAAAAAAAA GACATATTAA CTTATATAGT  
 GCCATTTCTG ACATAAGAAA TACACAAATA GAGGTAGTTT CTGAAACAAA GATCAAAAAA ATCTATTGTA TGGTGTCTTG  
 TATCAATGTG GCTAAAATTT TCGAGCTAAG TTTTATNAAA GACAGATCAT ATTCANGTA GGTGATTTTT GTATTG

SEQ ID NO:1318: (Length of Sequence = 300 Nucleotides)

GTGGGACTAC AGGTGCACGC TATCATACCC AACTAATTTT TGTATTTTAA GTAGACATGT GTTCCCCAT CTTGGCAGGG  
 CTGGTCTGAA ACTCCTGACC TGAGGTGATC CACCTGCCIT GGCCTGCAA AGTGCTGGGA TTACAGGTGT GAGCCAACAA  
 GCCTGGCCCA TTTATTTACT TTTTAAATTT CATTTTCTT CATCATGTAG AATGGACAAT TTCAGGAAAC TGATAGAAAA  
 TACTGTCTAA CATCAAATTT TCAAAAAAGT TTCTCTGTAA CAGATAAGGC AGTCAATTC

SEQ ID NO:1319: (Length of Sequence = 306 Nucleotides)

CAATAAGCTT TAAAAAGTTA GTGCCACATG ACCAGCATCG ACTGGCCTCA GACATCTGCA AGCACTCACC CAGGCCACAG  
 GGTCAAGTAG AGGGCTCCTG GGGCCACTGT AGCCCCTGCT GGGTCAGTGT AGCTGGAAGG CTACGGGNC TTAGTGGGGA  
 GCCACAGCCT TTCCCACTAG GGGGCCCTCT ACTCTGACAT CTCCCTGTGG TGTTCGGACC AAGGGTGGGG AGGGAGACAC  
 GCTGGCCCTA AAGGGAGGTG GTAAINAGTG AAGATCTCCA GGGCCAGNCC ACAGGGCTCC GTCCAT

SEQ ID NO:1320: (Length of Sequence = 373 Nucleotides)

GGTCTTGATC TCCTGACCTC GTGATCCACC CGCTGGGCC TCCCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGTGCCCTG  
 GCCGAGATAA TTATTTTINA GTGACGATTT AGCAACCTGA AAACCTTGGG TCTTTGGGAT ATGACCTCAG TATCAACACA  
 GAATATTGA ATGCTGGTTA ATATATTINT TTTAAACTGT GATAGAATTG AAATCTGTGA GCCACATTTT GAAAGTTTAT  
 TCTTCATTAA CTAGTCTTTT CTCACCTGAT TTCTTACAAG AGAGAATTTT CAAAAGGTT AGTTGTGTTT ACATTAAGAA  
 CTGGGGTTT GNTGACATG AAATGTTTCT ACACCAGCAG GTCTCAGATG AAT

SEQ ID NO:1321: (Length of Sequence = 366 Nucleotides)

GTITGGCTAA TCATCCTATG ATTTTCTAT AGCTTGAAAA CTTTTTATAT CTTAAATTTT TTNATAATTT TGAAGTATTA  
 TTGTTTGGGC TTGTATATC CAGTGTATTT TCAATTAAAT TCCCCTAACT AAAGTAATTC AAAAGGAATA AAAGTGTAA  
 GTGGGCTGGG CGTGGCGGCT CATGCCGTGA ATCCCAGCAC TTTGGGAGGC CCAGGCGGGC AGATCACCTG AGGGCAGGAG  
 TTGGAGACCA GCCTGGCCAA CATGGTGAAA CCTGTCTCT ACTAAAANTA CAAAATTAGC CGGGTGTGGT GGCCATGCG  
 TATAATCCCA GCTATTTGGG AGGCTGAGTC AGGGAGAATC TCTTGA

SEQ ID NO:1322: (Length of Sequence = 362 Nucleotides)

AGGGAGGGTA AAACAAATCC CCTCCAATG CTTGTAGAA GGGGATTAGA ATCACTGTGG AATTCGGTAT TGGCTAATAA  
 AGTATAAAG CTAAAGATCA ATGCTGAGT GCACAGTTGT CCTTCAAGCC ATGTACTTTC TGCTTTCCAA GANTAGANGA  
 CTACTTTTTA ACCAAGANTT AAAAATAANC TCATAATTTA AACACCTCTT TCATGCCAAA TGAAATCTT AGTGTTGAAT  
 AATCAGGCTC ACCTGAATAC AAAGTGTGCC TGAAAATGCT GACAATCACA AAAAAGGTTT TAGAAGCTTT TTCAAAAAAC  
 AAGTTCAGAT GGTTCCTACT GAGTTACTAT TTGAGGTAA AG

SEQ ID NO:1323: (Length of Sequence = 244 Nucleotides)

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CGACCTCAGT GTAAATCACA AAACGGGAAG AGCTGATATT GGCAAAATAA TTACATGGCT CATTTCCTTG CATGTCAAAA  
TAGGATTGTA TTGGTTGTAA AAGATGACAA ATACCTTTTC GGTTCATG TTCTTAAGTG GGAAGTCACT TATTACAGAC  
CTNATTGGGA GTAAACAAAG CTGTTAGACC TTTCATTATC AGTCCNNTTA ATCCCTTCAA TAATCCCCCT AAATCAGTGA  
GGCG

SEQ ID NO:1324: (Length of Sequence = 279 Nucleotides)

GATCCATGCC ACAGTGACCT CTGTNACCT GCACAGCACA GAGGGGAAAG CCCTGTACCA GGTGGCGTAT GAGAATGAGG  
TAGGCAACAG CTCTGACTTC TATGACATCG TGGTCATCGC CACCCCCCTG CACCTGGACA ACAGCAGCAG CAACTTAACC  
TTTGCAAGCT TCCACCCGCC CATTGATGAC GTGCAGGGCT CTTCCAGCC CACGTCGTC TCCTTGGTCC ACGGNTACCT  
CAANTCGTCC TAATCGGTT TCCCAGACCC TAAGCTTTT

SEQ ID NO:1325: (Length of Sequence = 338 Nucleotides)

TCAGTTATTT GTGTGTGTGT GTGTGTGTGT GTGTGTGTCAT CTGCAAAACC TGCACTTCAT TATCCAAAAA TTATTTGATA  
TTTTATAATC AGAGAAAATG CTATTTTAA ACCTACCAC TGCTGACCAA ACAACAATCA CAACAGCATA AACTAAATA  
CTGTTCAACA AATCTATTTT AGTGTAGTAA TTAATAATT CCTAAAATTA TAGACATCCC TAATATTCCT TCNTTAGTG  
GTTCTCAGA GTGCAATCTG TGGAGCAACT ACCTGAAGA AATTGAGGAG AATGAGACCN TGGGAACCT AAATGTTTAG  
NATGGTGCTC TNGGGGAC

SEQ ID NO:1326: (Length of Sequence = 393 Nucleotides)

AACTTTGGAG GGGACACCAT CACTCAAACC ATAGCTGTAA ATCTATTCCT TGAGTCCAGA TCACAAATTA CCAATGAAC  
ACGTTCTCCA TTTTAGTAC TTTTACCT GTAACCTCT GTCTACCTAA GATGAATATT TATTCATTGA ATGAATCATT  
TAATTTGGT GCCCAAAAT TCTCAGTGAA ACAATTTCTG GATACCTCTC CATCACTAAG ATAATCATA TGCACTGTC  
ATATCTTCA ACTTAGNACA AATCTAAAG CTCCATTTAT CCTACTAGA AGTGTCTGT TGCTTTTTC ACTCTCAAAA  
TATCTCCAT GCGCAACCA AACACTAANG GGNACCACCA TATCTGTCT AATGGAGGCN AAATCACTTT TTA

SEQ ID NO:1327: (Length of Sequence = 381 Nucleotides)

CTTTGGAGAA TTAATTCAGC AGTTGGTAAA ATCATTCTAT AATAATGGGT ACCATTCTGC TCTGTCCAC ATTTTATGA  
AGTCTCTTTA AATTAAAAA GGCAATGTG TTTGTGGTTC TTGAGCAACT TAAATACGTT GCTCTGAATA GTTATTGTGA  
TGAGGTAAIT TGTAACAACT TTTAGGATCA ATGCTAATTT NCTTAAATGT TTCTGTAGTT TCCCCTTAT TATAAGTAT  
ATTAGGCTGG ACTCTTGGCT GTAGTGCCA GAAACTCAA CTCAGATTAG TTAAGAAACA AAAGGGTGT GGTGACAGTG  
GTGGCTTTCA GACTATTGCT GCAGGCCAC CTGCCATCCT CTTACACCCT CAACATACCC T

SEQ ID NO:1328: (Length of Sequence = 289 Nucleotides)

AGAAGAAAT TCTTAAGCAG AGTACTTAAG TACAAAATG AGTGACTGAA AGATGCTTAA TCTAGGGAAA TTAAATGAGA  
AAAATACATG GTGTGTGINT TGGAGGGGA GCTGGAATTG GAATGGGCTG GAGTGATGAA AAAAGCCAA CAGATATAGT  
CTTCTGTTT GTAATATAGG CTCAATACTA AATTATGTAG GACTAGATAA TCTAGGTCCT AATGTCTCT TTTTGCTGGC  
AACCTGGGG CCAATTACAC TAGAGGGTGT GTAGAAAAA GAGGAATAT

SEQ ID NO:1329: (Length of Sequence = 364 Nucleotides)

TTGTATATTT GGGATTGTCA ATAATCTAGG CCACGTGGAA GATAACAGGC TATTTGGAT ATTINCTAAT TGCAATGGTT  
ATATTTCTGT GTAAATGCCT ATACAAATGT TTGCTTGGTG ACATATGGAA AACTTAAGCN CTTTATGAA AAGGCGACAA  
TGGGGACCTC CAAAGCGCCA AAGTTCTGC TAGGCATAGT GTTATTTTGA GATTACATTA AAATGGCTAT TTAGACCAT



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CTAGCTGAGA CTATTCCAAA ACAAACTTTT TATCANATTG TNATCATAAT CAACTTTCTA CAGGCTAATG ACTTTATAGN  
TTTACTINCTA GTGTATATCT ACTAGCACAA TTGGACCCAG TTCC

SEQ ID NO:1330: (Length of Sequence = 221 Nucleotides)

CAATATTTTAA ACAAATGCA AAACTGAACG TTACCTCAAA ATGAAACAGT GTGIGTACTG GCTGTTAGAA GTTGATGGCG  
GTCTACTGTT TGATAITCAC TGCCATCTTC CTCTGCCCCA CTCTACCTCA ACTCGGGACC GCTCACCTA ATGGTGGGCT  
TTGCCGCTTT ATGCCNTGTA GAGNAGACAC TGGGTAACCA CAGCAAATCA ACACGGGNTC C

SEQ ID NO:1331: (Length of Sequence = 279 Nucleotides)

AATAGAGATA ATGGTCAACT CTGAGAAGA ACCAAATGCT GGTGCCATCT TGGAAAGTCT ACATCACCTC CTCCTCTTAC  
TTCTTGAAC AGCAATATTT CTGGATTTCT TCTGCAAGCC CCAGGCAGTG CAGGATGCGT TTTTTTTCAG CAGCCAGTTC  
CTTCTCAGAG AACTGGCCCC AGAGTTTCTG GACAAATATA TTTTGATCTT TCAGAAATAT GTTCTNATTC ACTCCTACAT  
TTGGCACATT NTCCAAGGGC CCAGACTTGA AATTGGAGG

SEQ ID NO:1332: (Length of Sequence = 290 Nucleotides)

GGACGAGGAG ATGTCTTTGG TGGACTTGGG AAAGAGGTTG CTAGAAGCAG CAAGAAAAGG CCAAGATGAT GAAGTGAGAA  
CGTTGATGGC AAATGGCGCC CCATTACCA CAGACTGGCT TGGAAATCA CCCCTCCACC TTGCAGCTCA ATATGGTCAT  
TATTCACAG CAGAAGTACT CCTTCGAGCA GGTGTTAGCA GGGATGCCCG GACTAAAGTA GACAGGACCC CCTTGCACAT  
GGCTGCAGCC GATGGACATG CGCACATCGT GGAACCTGCT TTTTCGGAAT

SEQ ID NO:1333: (Length of Sequence = 201 Nucleotides)

CGCCAGCTA ATTTTTGTAT TTINAGTAGA GACGGGGTTT CATCAATTNA GTCAGGCTGG TCTCAGACTG CTGACCTCAT  
GATCCACAG CCTTGGCCTC CCAAAGTACT GGGATTACAG GCATGAACCA CCACGCCCAT CTGATTTCCC GTTTTCTGCA  
GGGTAAAGNC TCAGGGCCGG CCCATTGNTT TCAGGANITTT T

SEQ ID NO:1334: (Length of Sequence = 267 Nucleotides)

NNATAACTTT TGTGTGAAT TTAGAAAATG TGGATCTTTT ATACTGTCTT TCCCTTTTCT TCTGCCATCT TTATCTTCTG  
CTGAAGGAGA CAAACAATAT TTTAGGTGAC ATCTATCACT TTATGTAGGA CCTGCAACA CTCATGTTGT CTTCGGACAG  
ACAAATGGAG AATGTAAATC TGTTACACTG TGACAGGATA TAATTNTGGA TTGCATAGN TINCAACAA GTGTCTGTGT  
GATGANTAAA TGGTAAAATA TATTTAT

SEQ ID NO:1335: (Length of Sequence = 279 Nucleotides)

GGNTCTTGTT AGAATGCAGA TTCTAATTAA AAATGTGTAG GACAGGGCCT GAGACTCGGT ATTTCTAACA AGTTCCCAAG  
TGATACTAAT GCTACTGCTT CACAGATCAC ACTTTAAATA GTAAGGTTCT TGAGAGAGAT TAGTCTCAAG AGAAAAGAGA  
CAAAAATCTC CAGAGCAGGA AGACCAAGAA AAAAAAATGG AAAGTAGCCA GTCGATTATC AACTAGATGG CCTTAGTGAG  
ATTCTGCACA ATATTTTCATC ATACAAACT GNTTCCCA

SEQ ID NO:1336: (Length of Sequence = 398 Nucleotides)

TTTTTTAAGC ACTCTTGTTT GGACTGGTCA AAGATGTTCC TAAACAACA TTGCTGTCAC CAAGCCTCCC ATGANTTAGG  
CTGGCTCCTC CCATGTGGAT ATCTGCTTCT GCATAGTTGG TGAAGAGGAA GCATCCTCAG TCAAAGCTAC CAGCTGAGGA  
ACCTTTAGGA AACCCCGCTG GTACCTGGCC TGINTTTTGT AAGTATACAT CAGGCCAGGG GGCTGCTTGC CAAGCAACAT  
CATTGACTGC ATACTGTTTA GTGCATGCAT TACCAGGGCT CAAACATCCA AGTGATGCTA CCTGAATAAG TCGAGGAATT

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TTTGATAATA AACATAAGCC AAATCCAAAA AAATGTTCTG GGTITTTTCCA TCATTTCAC TCATTAGTNC CAGGAAAA

SEQ ID NO:1337: (Length of Sequence = 272 Nucleotides)

CTTTCCTCAG TATCACAGGT ACCGTGTTTN CTGGAATTTA TTTAAATGT CACCTTGTAG TGTTCCTCT CTAGGGCTGT  
TTGTTTCATT TCCCTCTGAA TGAATGCTGC CACACGGTCA TATGTGAGCC AAGTTTACAA GAATGGAGTT GCTGCTGAAG  
AGATCTCTCA TTCATCTCCC CCAGTGCTG TCCTTCACAA TCATAACGTT ACCCTTGCTT GACAAATATA CTGTATGGCA  
AGTCATAAAG GTCTINGAAC AGSACTTGAC CC

SEQ ID NO:1338: (Length of Sequence = 212 Nucleotides)

TAGTCCCTT TATATAATAT AATCAAGTTC CTCATCTGG GCATTGAGTT AAATTCTACA ACATTGCCAA AATCTGATTT  
GACTCTACAG AATATGTATA GTTTATTTAA CCAGATAGTA ATTTAAATTT TTACAACATG CGTATTTTCAT GTAATATTAA  
TAACAGTAAT TTAAATTAAT ATTCAATACA TACCGTTTGA ATTTTATATA GG

SEQ ID NO:1339: (Length of Sequence = 280 Nucleotides)

TTTTTAGGAA TAACAAATGT TTATTCAGAA ATGGATAAGT AATACATAAT CACTCTTCAT CTCCTAATGC CCGTCCCTCT  
CCTTCCTGCAC AGGAGACACA GATGGGTAAC ATAGAGGCAT GGAAGTGA GGAGGACACA GGACTAGCCC ACCACCTTCT  
CCTCCCGGTC TCCCAAGATG ACTGCTTATA GAGTGGNGGA GGCAACAGG TCCCCTCAAT GTACCAGNTG GTCACCTATA  
GCACCAGCTC CAGATGGCCA CGTGGCTGCA GCTGTACTCA

SEQ ID NO:1340: (Length of Sequence = 324 Nucleotides)

CTGTTCCACC TCAGATCATC AGGCATTAGA TTCTCATAAG GAGTGTGCAA CCTAGATCCC TCCCATGTGC TGTTCATAGC  
AGGAATTGCA CTCCTATAAG AATCTAATGC CACTGCAGAT CTGGCAGGAG GCGGAGCTGA TGGTGGGAAG GTGGTATTTC  
TCGC TCTC GCCTACTGCT CACCTCCTGC TGTGGGGTCC AGTTCACCAC ACAGACCACT GGTCTNTGAC TCAGGGACCA  
CTAC TCT AACANGNTG AGGAALACAA CTGGGTTTCAT CACACAATTA TTTTAAAGTT CAGGTTTTNC AAATACTTA  
TCC

SEQ ID NO:1341: (Length of Sequence = 376 Nucleotides)

CTAATCAAGG GTACAAGATG TCTAANTCAA AGGCCAGCT CTGCCTACAA GTCAAATATC TAGGCCTAAT CTTGGCCAGA  
GGAACCAGGG CCTCAGCAA GGAATGANTA CAGCCTATAC TGGCTTATCC TCGCCTAAG ACATTAAAC AGTTGTGGGG  
GTTCTTGGGA ATCACTGGCT TTTGCCGACT ATGNTCCCC AGATACAGCG AGATACACTC TAAGGAGACC CAGAGGGCAA  
ATACTCATCT AGTAGAATGG AGACCCAGAG GGCAAATACT CATCTAGTAG AATGGGGACC AGAGGCAGAA ACAGCCTTTC  
AAAACCTTTA AAGCAGGCCC TTCTTNCAAG CTCCAGCCTT TAAGCCTTNC CACAGG

SEQ ID NO:1342: (Length of Sequence = 335 Nucleotides)

ACCCTTCCCC ACTCCCTGGT CCCCAGGAGC AGCTCCTTCT GCCCGANTNA CTCACAGTGC AGGGAAAGGA GGCAGGGAAA  
AGACCAGGAT TCTGTGAGTT CTGAGGTTGC CACACACAAA GAAGCTGTGG TTTCTCTGCC TCGGCCACTG ATGAGACTAA  
AACTGGCTTC CCTTGGAGA CGGCAGATTT CAGGCTGATC CCTGCTTAAG CCTCTCATC CCCACGCTGG TCCTGGTATT  
GATACAAGAC CCAGCTGGTG ACAAAGCCTC CAATCCTGGG GGTCCACGGA GCCTGGGGCT GANATTTCCA GGAATATCC  
GCCAGTGGGC GCCCA

SEQ ID NO:1343: (Length of Sequence = 379 Nucleotides)

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GAACCCAGGA GGCGGAGGTT GTAGTGAGCC AAGATCGTGC CATTGCACTC CAGCCTCGGC AACAAGAGCG AAATCCATC  
 TTAAGAAAAA AAGAAGGCTG TGATAGTTAA ATTTATGCAT CAACTTGGCT AGGCAATGGT GTCCAGATAG TTGGTCAAAC  
 ATTATTCTAG ATGTTTCTGT GGAGGTTATT TTTTAGATGA GATTAGCCTT GTAAACTGGT GAAAATTGGG TGAAGGAGAT  
 TACCTGTCAT AGTGTGGTGG GTCTCATTTA ATCAGCTGGA GGCTCAATA GGGAAAAAGA CTCACCTTNC CCTGGAGCAA  
 GAAGGAAATT CTTGCCCAGC AGAACTTCTT NGGCGAGCAG AATGCAACCA TAAACTCTT

SEQ ID NO:1344: (Length of Sequence = 400 Nucleotides)

GACGGATGGG ATCGGGGCTG TGCTCTGCAG GTCTCCCCA GAGATGTTGT CATACTGCGA GGGATGCCGC TCGTAGGACA  
 CCTGTCAGCC AGAGCCGTC GCGTCTGNN AGGCTGCGCT CCTGCGCTTC TTCTCGGGGA GAGCAGGTGG CGTATCTNN  
 TGCTGCCCTG GGGCCAGAGG TCCGNTGGC TGGGGATGGC CGCCAAGAGG CAGCTGGAAA GGAGGGCCAA GAAATGGAGA  
 CCCAGACTCC CCCAAAGACT CTGGCAACGG GCTAAGGTT CAGGGCCGTC TGCTGAGGTA TCTGGTCTGC GTTAGAGAGG  
 TCTTNCCTGA GGAATTCATA GTGGGATCA TAGCAGATCT TGTCCCTTT CTATACCATC TGTCTATTT GGAGATNGCT

SEQ ID NO:1345: (Length of Sequence = 347 Nucleotides)

CCTCTCCCC CAAGGAGCTT GCAATTTTAG GAACTAATCC AGTTTGAGGG CTGAATTTAA GTTAAATCA ATTACTGCC  
 TATGTACTCC TTTTAAACA ACATTAGGTC AAGACCCTT CAGTGCTAAA TAACTGATT TGTATTATC ATACATTCAA  
 GTTTTATAA TGTGTTTTT CTCACCTTAC TGAAATATCA GAATCCAGCT CAAAAACAGA ATCAAAGAGG AGACTTTTAA  
 GCTTATTCAA TAAAAACTAT GGTACGGTAA TATTCAAAT AGTGGAATC ATTATATTAT CTAAAATTCT CAGGAACTG  
 CTTTAACCAT GGATTAAATA ATTTACC

SEQ ID NO:1346: (Length of Sequence = 287 Nucleotides)

CAAGTCAATA CCCATAATTA AGTCAAGTTG CCAGCCTTAA TTATATTNT NTCTGCTCG TCACTCTCT CTCTCCTTC  
 CTCCTCCCT CTCTGCCCCA CCCCCGTGTA CATTATATAC CAATTCATTG GAGATATATA TATGINTGIN TINTGINTIG  
 TGTGTGNNC TGTGTGTGTG TGTGTGTTAA AGAAGCAGGA TGTCTTACAC AGATGTTTCA TATATTGAGG NATTACAGAG  
 TAATTACAGG GAAAGGTATT AACTGTCTT TCAACACCT AGGCAGT

SEQ ID NO:1347: (Length of Sequence = 295 Nucleotides)

ATTAAACAAC TTTTTTAAAC TTTTGTGCA CAGGACAGAA AACTGCCTGT ACATGCTATG TCCACTTTTG GAACACAGAT  
 TTTTACAAT TATGAATGCA CAAATCTTA CATATCATGC AACTCTATGC CAAGAACCCA ACTTTCTTCC ATGCAACAGA  
 TATGAAGATC TAAATGGAAA CCTAGCTAAG TCTTAAACAC TTTCCAGTA GCAAGTATAA TATATGTTGT TGAGGGAAAA  
 CCAGTCTTAA CAATTNCTG TACACAATAT TCATGTGCCA AATACAATGN CAGGN

SEQ ID NO:1348: (Length of Sequence = 332 Nucleotides)

AGTCCCTGCT ATGTGGATAT TTGGTAGCAA TGACTGATGT GGAACTACA TATGCAGATT TTATTGCTTC AGGAAGAACA  
 GGTAGAAGAA ATGCAATACA TGATATCTG GTTCTCTCTG CAAGTGGCAA CAGCAATGAA TTAGCCTTGA AATTAGCAGG  
 TCTTGATATC AACAAGACAG AAGGTGAAGA AGATGCACAA CGAANTTCTA CAGAACAAAG TGGNGGAAGC CCAGGGAGAA  
 GCAGCAAAT CTGAAAGCTT AACACCCAC TTTGACCCTC GGCCACACCT GAAATGTCT CAAATCTCCA GGGNGTATCT  
 GGAATGCAT TT

SEQ ID NO:1349: (Length of Sequence = 296 Nucleotides)

GCCCCAAAA CAATGACACA AAATTCATT GTTAATTCA TGTAAGGAA AAAACAGCAA CACCACCACA CAAACAGGAA  
 AGTGGGAGTA TGATTAGGAG GGGTGAGATG AAACTATTT TACAGTAACA TTTCCACCAA AAGACTGTCC TAAGAACAGC

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CTGTCAATAC AGTTCACAGG GAAAAAGCAA ATGTGGTATT TTTTGTATT TTTTAAAAGC TCCCTGGGTC CCAGGTGTTT  
TGCACTTTTC AAGGNCITAT CTGCTAAAGG AATGCCCTTT TAGGGTCACA GCAGGT

SEQ ID NO:1350: (Length of Sequence = 317 Nucleotides)

CTGTGCCCCA GGCTAGAATG CAATGNCGTG ATCTTGGCTC TACTGCAAC CTCCACCTCC CAGGTTCAAG TGATTCTCCT  
GCCTCANTCT CCCTAGTAGC TGGGATTACA GGTGTTCCACC ACCACGCCAG GCTAATTTTT GTATTTTTAG TAGAGAAGGG  
GTTTCACCAT GTTGCCCAAC CTCGAACTCC CAACCTCAGG TGATCCACCT GCCTCAGCCT CCCAAAGTGC TGGGATTACA  
GGCATGAGCC ACTGTGCTGT GGCCAATAAA CTATATTTTN TCAAGCCAAA GTAGGACAAG CACAGTTTTT AAAAGGG

SEQ ID NO:1351: (Length of Sequence = 349 Nucleotides)

CGGATGGGTG GGATGAGACT TCAGCTTTAT TGGAAATGTT TTATTTCTTT ATCTAAAAAA ATACTAGAAA GAAATACAAC  
AAAAATGTTAA CAGTTGTTAA TGTCGGCTC TGTAATATA GATATTGTGT TACTTTAGTC TTTTTTTTAA TCTCAACTAA  
ATTAAAAAAG GAATTTTAGT CTTTTTTTAT CTCAACTAAA TTAAAAAAGG AATTTTAAAA CCCTAGTGTT ACATGCAAGT  
GAGTCCAATA ATGGCAAAT AATAATGAGG NTACATAGGA AGGGTGACCT AAATTTTAAT GGGTGAATAC TGGGTCCCCG  
GTACAAGTTT GANAATTTT GAATTTCCG

SEQ ID NO:1352: (Length of Sequence = 304 Nucleotides)

TTTTTATACT ATTTAAAAGA ATCCTTAAAT GATGGGTATT CTCTAAAGCA TGCGGGGCTT AAAACCTAGA TGATGGATTG  
ATAGGTGCAG CAAACCACCG TGGCACATAT ATACCTATGT AACAAACCTG CACATTCAGC ACATGTATCC CAAGACTTAA  
AGTAAAAGTA AAAATTAAAA AAGATGGGTA TTCTATATTT ATCTTTCATG TTACATTTTT CTTGTGGGG TTTCTAAATA  
AACTTGTAAT CATGAATGTT TTATTTCTAT TCTGTATTTT AAAAGAAGC TGAGTAACAA AAGG

SEQ ID NO:1353: (Length of Sequence = 307 Nucleotides)

CTTAGTCTGA CATTAGGTTA TGAGAAGTAC AAAAGATCCA CAAGTACAAA AAAATCTGTA TAGCTTTGCG GTAGTTGAAA  
AAAATGCAAG AGAACAAAAA AATTTTTTGA GTAATATTCA TCTCTGCAGA TCTGAGTGAC AGTCCGCTTG AAACCCGCT  
GTAAAAGTGG TAAAAAATGA TTTCATTGTG ATTATGTTAA AATTTTTGAT GTCTCTNITA CTTGTTTTAG GGGAACTCGG  
TCTTCTGNC ATTTATACCT GGATANGTNC CTTTCCCTGT AATTTTTTNC GAAAGGCTCC AATTTCC

SEQ ID NO:1354: (Length of Sequence = 407 Nucleotides)

GTGAAGTTAA GCAGCAAGGG CTGAGAACCG CTGCTCCAGA GAGGCCAGGA GGTCTGGTCA GAGGCTGGGG CCCCAGCCCC  
CAGGCACCTC TCTGTGTCAG TTTCCCTGGA GAAGTCATGA GTTGAAGAG TAGGCAGAGG CCAGGTGTCA TCACTGAGTC  
ACTCATCAAT GGCCAATGAG AGTNCAAAGG GTAGCTCTGA GCACAGGATG TTAGCAAGA CTCTGGGTT CAGCTCCAG  
TCCCACCANT GCCAAGTGGG GGATCCTTAG CAAGGTACTT ACCTTTTTNN TGCTCTGTT TCTACGGCTG CAAAATGGGC  
ACAATAATGT CAGATTCATG AGGGATAATG AGGACTAAAA TTAGGNTAAT TNCCTATAAG CTGCTTCTAA ACGTATTTAC  
TTATAAA

SEQ ID NO:1355: (Length of Sequence = 355 Nucleotides)

ATTACTATTT GCCTCTATAG GAGGTTTCAT TAGGCATCTN CTTCAATTATG AGTGCAATAT AATCAAACAC TTATCAGTAC  
AAGGCAGAGA GACCGGGACT AGCTGCCTAC ACATCCTCAA TGAGCTTTAG GAAATGTGAA GGAAACATGG ACTGAAAATC  
TTCTGGTGGC AGGTACTCTC ATGTGTTGTC CTATCTGATG CTCTCAACAA CCTCTAGGGG TAGATATTGT GACCCATC

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TTGCAGAAGC CTTGGCTCAA GTATATGCTC AGAATCACAG AGCTGGAAGA TAAACTTGGG TCTCTCTAGT GCCAGAGNCC  
ATGNCCTCTG ATCTCTCAAG GGCAGAGGTA TTACC

SEQ ID NO:1356: (Length of Sequence = 406 Nucleotides)

TTTTTTTTAG TTATTTCACT CTCTCTGTIA AATTATCTG ATAGGATTCT GCAGAGAACA AAATTCAACA GGGCCCTGTG  
GAGCAAGGAG CCCCTTTTCC CTATCTCCTT CCTCTAAGAG CTACACCCAG ACCAGCTGGT TATCAGCGGA GGCCCCGCTG  
CTCCTCATGA GAACGCTGGT GGAAGACGAA GGTGATGGCA GTGGAGGCAG CATCCCAGGC AGCCTGGAGT ACCTCATCCC  
GGAGCCCCCA CTTATCAGTG CAGTGGTTCC ACCCTGCCAG GGTCTNAAGT GCAGTCAGAA CCATCAGGGG GTNGCCGGAT  
CTGACGGCTG TTACACAAC GTCGGCAGTG CAAACCTAGG GACAGAAGGC ACANCTNAAG TCACTNCAGA TCCCATCTTC  
CTACTG

SEQ ID NO:1357: (Length of Sequence = 231 Nucleotides)

TTTCACAAAG AATTATGAT TGCTTCACCA GGTCACTAGT GAGCTAAAGT CAAGGAATGA CTACAATCTT GTAGCATTTT  
AAAGTGATTA GAATTGAGA AACTTTTACT ACATTATGTG TTAATATCAT AAGAACACTC CTTGGGGGGC AATTGAATAA  
TAAAAGGNC TACATTCTTT GCCCANGTG NTCATTTTCA CCCACATTC AGTATTTTNC TCTAACTTGG G

SEQ ID NO:1358: (Length of Sequence = 302 Nucleotides)

CACAACTAAT TTGTAAGCCC CTTGAGCGCA GGAAGTGGT TTTTAAAGAA TGATGTATTC TTCACAGTGC TTTCCCTTTC  
TGTTACCCAG GGAGCACATG GCAATATAAG GGCTCCTGGG ATTGANCTT AAGTACAGAG AAAACCTAAG AATNCTTTTA  
GATAGACAGA TAAGAGACCA CAGAGAAGA GCAGATTCTA AGGTATNTGT GAGAAACGTT ATGTAATGAA AAGATAATTG  
ATGACACACA CTCCAGAGN GTGCTGGCGA GATTTGATTC AAAAGCACAC GGCTAGGGCA CT

SEQ ID NO:1359: (Length of Sequence = 356 Nucleotides)

TAATGATGAG CCTCTGGGTG CAGGGAGAGG ATAGGACTTG ATGCTTTCCA GGGGAAATAT TTAATTTTC AGTACTAAGT  
TAAGTCTGTA TCATTTTACT TTTTATATAG TTTCTTATTT TAATGTATGAT GAGATGAAA GCTTGCACAT AAAAGATGAT  
AAGAAATTAG AATTCATCGT TTCTGTGTA CCAAGAAGAA CCTTAGTGAT CTCTAAAAGA ATTGTTGTTA AAATATGGAT  
TCINCTTTCC TTCTAGTACT CCCCTAGCAT GACANTGAGC GTGTGATCCA TTACCAAGTC TCCTCATGAA AACCACAGTG  
AGTCAGCCCT TCACAGAACT ACTACGGGAG GAAATT

SEQ ID NO:1360: (Length of Sequence = 366 Nucleotides)

AAAATTTAAT TCAACTGACC CATCCACCG GGAAATGCCA CTAGGAAGGT GTAGCCTGCA GTTTTACCTA ATAAGCACAA  
CTGGAGGGGA ATAGAAACAC AGAATTGTGA GGAATCGCA AGGCATGCTG CTCAGAGCAT GCCTAGCCCT GCACTGAAAG  
CTATGAGATA CTGGTTCTGA GGCAATGGCTG TGCTTGCTGG TGGGAGCGGG CATCCTCCCT TGGCCTCCCT GGGACACCTC  
CTGTGCTCCC TGCACGTCAC TCCAGTGCC TGGGGTGTCT ACACAACCTG CTGCAGCTTC ACTAAAGAAC AGGTGGCACT  
NCAGCTTCTC CGGGTCTGC TGAGCACAGG GNCCCGCCAN CCTTGA

SEQ ID NO:1361: (Length of Sequence = 347 Nucleotides)

CCTCCTACTG TCTGTCTGT GGGACAGTTG CCTCCCCCTC ATCTCCAGTG ACTCAGCCTA CACAAGGGAG GACCAACAGG  
NTCTAGTTTT TCCACGTGAT GGAGTTCCAA GCTTTTTTTT TGTGTTGTT TGTGTTGCA AAATAAAAC AATACACATT  
CCAAGAGAAA TGAATGCATC TTTGACACG TCTCTATTTT TCATTTACAT ATGTACACAC GNCCCTTGAG TCGCTGCTGT  
TGACACGGCC CNGTGTGGAC GGGTCAGGCC CGAGGCCCT CGGGAGCAGA CCTGTAGCTC TCTGGGGGAT CAGGGCTTCC  
ATTAGGGAGA AAGTATTAGC AGTTTCT

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SEQ ID NO:1362: (Length of Sequence = 358 Nucleotides)

CCATTCAATC ATTCAATCAA CAATATTCA TCAACAAATG AAGCAAAGGA GCACACAGCC AAGTGATGGA GCAAAATCAC  
 AAATTAAAG GTAATTCAGG CCAGGTGAGG TGGCTCATGC CTGTAATCCC AGCACTTTGG GAGGCCGAGG CAGGTGGACC  
 AGCTGAGGCC AGGAGTTTNA GACCAGCCTG GCCAACATGA TGCAACCCCG TTINTACTGA AAATACAAA ACAAAACAAC  
 AACATAAAAA AATTAGCCAG GTATNGTTTG CAGGCGNCTG TAATTNCAGC TTAGTCAGGA GGCITTTGGCA NGGGCTTCAG  
 TTAGCCAAGA TCGGACCCIT NCACTTTTCAG CCTGGGTA

SEQ ID NO:1363: (Length of Sequence = 312 Nucleotides)

TATTTAAATA ACGTGCAAT TCATAAATCA GCACATTTAC TAGATAGGTA GGATACTTTT NATCCATTTC TGTGTAAAA  
 AATTAGCGCA TGTTCCTCTT TATGCCCACT TGTATTAGCA GAATAGTGTT TCGGATTCCT CTGAATGGNT CTGTATTGAG  
 TCTGTATAGA CCCGAAGGA AAAGGAGGAA TTGCGCTGTC CCGAGAAATG CTCGCTCCAG CAGTTTANGG NAGAAATCTC  
 TAAACGTTTT AAATCACATA CTGACCAACT TGTGTTGATA TTTGCTGGAA AAATTTTGAA AGNTCAAGAT AC

SEQ ID NO:1364: (Length of Sequence = 345 Nucleotides)

CTGACAGATT TACAGATGT GACCTATTGA AAAATACCAC AGCCAGAATG GGCTAAACAG GTATATAGTT AATACAACCA  
 CCACCATCCT TTAATTTTAA CATAGCTCTT AGTAGGAATT TCATAAAANT GGACATCACA GCTAAAATGC ATTATTAAAT  
 CTCCTATCTG CTGACAATAA AAAAGCAGCA AACTCTTGA TTTCTATTTA AATGCACTAG ATGGGAATAT CATGTTCTAG  
 GGGTGTTTGC CTTCAAACCA AACCCACAGC AACACACACA AGCAATTTG GTATCCACCA TTTTAAATTC ACAATCTGAG  
 NCTAAATGAA TGGCTATTTA TATTT

SEQ ID NO:1365: (Length of Sequence = 255 Nucleotides)

CTCCAGAAAG CCATTGATCT GGTGACGAAA GCCACAGAGG AGGACAAAGC CAAGANCTAC GAGGAGGCGC TCGGGCTGTA  
 CCAGCATGCG GTGGAGTACT TCCTCCACGC TATCAAGTAT GAGGCCACCA GCGACAAGGC CAAGGAGAGC ATTGAGCCA  
 AGTGCGTGCA GTACCTAGAC CGGCGCGAGA AGCTGAAGGA TTATTTACGA AGCAAGAGA AACACGGCAA GAAGCCAGTC  
 AAAGAGAACC AGAGT

SEQ ID NO:1366: (Length of Sequence = 322 Nucleotides)

AAAAAAAAA TTCCAAGAA ACAGAGTAAT TTCTCTCTT GCCTCAGCCC TAAGTCATCT CCCAGACAAA AAAGCAATCA  
 TCATTGTCAA ATTTAAAGG GAAAAGGAAA GACTTTTATT TGANTGAAA GATTTTTC AGTGTGATAG AGAGGGAAGA  
 CTGAAATAAA CAGAATTTAC AACCTTGCA CCTTGCACC TTCTCTCTT AGCAGTATGG CAAACTAAAT AACTTGCACT  
 GAAAACGGGT TAAAAGCTG TATACTTTT TAAAAATAT ATTTNGTTA TGTCAATGAT CTGCACAGTT TTGAATACAA  
 AA

SEQ ID NO:1367: (Length of Sequence = 349 Nucleotides)

GAAAACAAGG TCAACTCAC TCATCATTAG AGAAATGCAA ATCAAAACCA TAGTGAAATA CCATCTCACA CCAGTCAGAA  
 TGGCTGCTAC TAGAAATAAC ATGCTGGTGA GGCTGCAGAG AGAAAGGAAT GTTTATACAC TGTTAATGGG AGTNTAATTA  
 GTTCAACCAT TGTGGTAGAC AGTGTGAAA TTCTTCAAAG ACCTAGAGAC AGAAATACCA TTTGACTGAG CAATCTCATT  
 ACTGGGTATA TAGCCAAAGG AATATAAATT GTTCTACTGT AGAGAAAACA TGCATGCATG TTTGTTTGCA GCACTATTTT  
 ACAAGAGCAA ACACATGGGA TCAACTTAA

SEQ ID NO:1368: (Length of Sequence = 379 Nucleotides)

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CTGGGACAGA GACCTTTGCA TTGCTCCATG TGTGGGCTTC AGCTGGGACA GAGACCTTTG CATTGCTCCA TGTGTTGGGG  
 CAGGTCTTCC ATTTCAATCT CCTCTGCCCT AATTTATTAG CCATACTTGT GCTATTTATT ACTTTTAAAC CCTAATCCTT  
 TTTCGTAAAT TTGTTTACAT TTTCAGAGT GCCAGCATTT TACAATGTGT CTTTTATGTC TCACAGAGGT CATCATTAGG  
 TTAGACCTTT GGCTTCATGT GTCTCCCGAG AGATGGTTTA TAAAATTGTC AINCTTCTGG CACAGGTGGT GTGGCTTAGG  
 GATTAGGACA CAGCCTGCCT GAGTTCACAC CTCATCTCTC CCACTTAACA CTGATAATT

SEQ ID NO:1369: (Length of Sequence = 319 Nucleotides)

ATTTCTGGTC TAAGTTTTAT TATTTCTTTT CTTCTGCTTG TTTTAGGCTG ATATTGCACT TCTTACTCCA GTTTTCTAAG  
 GTGGAAGCTT CGACTATTGA TTTCAAATCT TTTTINCTTN CTAATCTATG CATTCAATGT TATAAGTTTC TGTGAAGCAG  
 TGATTTTATT GCATCCACA TTTTGATAGG TTATATTTCC ATTTAGTTAC AAATAATTTA AATTTCCCTT GAGATTTCTG  
 CTTTACTTAA TGTGTTATTT GGAAGTGTAT TTTTATCTC CAAATATTTA GAGATTTGCA GCTGTCTTTA TGTATTAA

SEQ ID NO:1370: (Length of Sequence = 343 Nucleotides)

GGAAAACATA AATNTTGACA AGTAGITCAA GACTGTTGGG ATAACTTAG CTAGAGTGCA GGTCACTAAT ACCCATCTTT  
 ATAAGGAAGC TGAAAAGGGA AGTATGAGGA CAGGGAGAAC AATGACTTIN TCTCTCAAGC TTGACTTAAA CCACCAGGAA  
 AGTTCTTAAA GCCAAAGCCT TTCTCAGACT CTCACCAAAC CATAAGAGTC AGAAAAATGG TCGTTTTCAA AGGAGTAGAA  
 AATTCGTGAC AAAGTAAACA ACAGCTGAAG CAGGAAAGGN ACATACATTT NNTCACTTAG TGGCAGCGAG GCAAAACAGA  
 ACATAGGGCC AGCTTGGTTA TTT

SEQ ID NO:1371: (Length of Sequence = 295 Nucleotides)

ATTTCTINCCT GGGCGGCGAT GATCTGAGCA ATGCCCCCA CAACTTGGT TTTCACTACA ACATCGTCTG CATCAGCTTT  
 GCCAAAAGCT GCCTTCTGGG CTGCACGGAC AAGATTGINT GAGGCTCTTT TCACAGCATT TCTGCGGCC TGTAGCCGCC  
 TCATGGCCTC TNAATCCTGG TCGGCCCTCA CCTTGACGGC CACCAGCAGC TGAGCCGTGG AAGCGCGAC CTGCTTGGCA  
 GATGAGATGA GCTTCTCTC GCTGGCGTGT CCCTGAACGG AGGCATTGGC CGCCT

SEQ ID NO:1372: (Length of Sequence = 340 Nucleotides)

TTTGCTTTCA GATAATGTTT CTGTATACIT TATAAATGCT ATCTGTGGTA TCTCTGTAT AATTNACAAT GTTTGCATGT  
 AAAAAACAAA ACCCATAGAC CTTAAAAAAA AGAAAAAAG AATATACAC TATACATAGG CACAGCTTAT GCCCAGAGCA  
 TAGCAGGTGC ATAAACACT GTTGCTATAA ATGCAAGAAA AAGGTCATTT AACCACAATC ACATTTTTTT NCATAAGNEN  
 GTCTGAAATC TATACAATAT ATACATCIAT GTTTCATGT GGAAATAATA TTCTTTTAAA TTTCAAGGCG TGTATATCCC  
 CTGCAGGCCT GCATAAATGG

SEQ ID NO:1373: (Length of Sequence = 315 Nucleotides)

AATCCTGGGG GTGATTTAGA ACTTAGAGGC ATTCTCAAAA TGGACCAAGC TAAATGGTAG CCTTTATTTN CTGTAATGAT  
 TCACCATGGG AAAATTAGTA ATTCTTTAAA CTTCTTACTT AATCTTATAT GTATTCCAAA TTINCTAAAA AGAAATTAAC  
 CTAGAGGTTT TACAGAATC CATTTTTTTT TTATTNCCA GAAAGGAAAA ATTTATCTGT NCTGTNATTT TGTAAAAAT  
 CCTATTCCAG CTAATACTAT GGAAAAAGGA AAAGAAGAAA GGAGGAAAGG AAGGGAGAGA GGAAAGGAAG GGACG

SEQ ID NO:1374: (Length of Sequence = 327 Nucleotides)

GAGCCAGTGG TGGCCCCCAA CAGCCCAATC TGGTACTCAG TCCAGCCTAT CAGCAGAGAG CAGATGGGAC AAATGCTGAC  
 GCGGATCCTG GTGATAAGAG AAATTCAGGA GGCCATCGCA GTGGCCAATG CAAGCACTAT GCACTGAGAT GCCTTGGCCA

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AAAGGAAAAT ATAAAAGAAA ATAAATCTC ACATTGCTGC TTAGCAGGAG AATTTTAAA GACTTACAAA TCAACAAGCT  
 GTTCAAATAA ATAATGAATG CTGCAGCTGG CTCTTACATG GGGCTTTNAG TGTCCCAATA GTAGCAGATG TCCAGTTCT  
 ATAAAAT

SEQ ID NO:1375: (Length of Sequence = 338 Nucleotides)

TGCATGGAAA CTTAATCTAT TCAGGTCCCA ACTTTCAGG TTCTCTGCTC TGACAAGTAC TAGAGGCCAA TATGATAGAC  
 TAGTCTGAGT TGGATGCAAG TTAGCCATT CCAGGAATGA TACCAGGATA AGTATAATGG TCGTGAATAT AACCGGATTT  
 TAAGGGAGAA TGATTACACC TGGAAACAAA CTGTCAATAC ACAAGTAACT AGTTGTTAAA GATTTCTAAT TTTGACCAAA  
 GATTTTACT TTCTGTTAT AGAAATGGAA ATAAACATIN ACACTTTAGG TTTTGAAAGC AACCACCTCC TAACACGGTT  
 CTGAGTTGGG GGCCAACA

SEQ ID NO:1376: (Length of Sequence = 307 Nucleotides)

CAAGCCTCCC TCAAAAAAAT CCCAGAGTA ATGAAAATAC AAAGTCTGCT TGTTCAAAT TATGGTGCGA ATAAAAAGG  
 AAAGGGAGGA AGTGATGGAG TAAAGTTCAG ATTAAAAATA AACGGAAAGT CACAACAGTC GAAAGGTGGA AAAAAACCGC  
 AAATGCCCAT GANCTGATGA ATGGATAAAC AAAATTGGT GTGTGTGTAT ATATGTGTAC AAACCTCCTT TTTATGATGA  
 AATAGTATTT CATTGTGTGT GCACATGTIN CACACACANT TTAAATAGTA TTTCGTGATA AAAAAAG

SEQ ID NO:1377: (Length of Sequence = 353 Nucleotides)

TGGAATACAC TTGTGAATAC AGTGTGTAGG ATACATTAAC AGTTTCTGA GTGGGCTGCT CTTTTTCTT CAATACTGTA  
 TATATTTTIN TTAAGCTCTT CTTTAAAGA TAAATATTT TCATCTTCT CTTAAATCCT CAAGGATTAA CTCTGAGTCA  
 CCATTGTGG TATTTTAAAT CTTTTTAAAT AAATCTCTGT ATTGCACTT GCATCAAAAC AGTAAACAT TTCACAGGTT  
 AGGATCTGAT GACCATTTTA TAATCAACAT TTTTAGGTAC CACAAGAL ACTTTATGAG CATCCACTGA AATTATGGGC  
 ATTAGTGCAT ATAAATATCC AAAAATCCAT TTT

SEQ ID NO:1378: (Length of Sequence = 315 Nucleotides)

GATTGGCAA ATATTGGGT GAGATTGAA AATAAATTAC ACCACTGCTG CACAAGTTAA TGTGAATCAA GCATCTGTTT  
 ATTTCAATCA GTTTATGCCT TTTTCTTT TTTTGTGCGAG TGCAGTTGGG GTCACAGACT CTCAATTGTA CAAGACACTT  
 TAAAAGCAGG AGTAGAAATT AGGCTGGGT TTTACAATA TTACAGGAAC TGTCATAACA AACTTCAAGT GGATCAGTTT  
 ATTTCTGATT TAACTTGGGG ATAAACAGTG TTCAATATTT TCCAAAAGAT TCTCCCCATA TAGAAGTCCC AAAAG

SEQ ID NO:1379: (Length of Sequence = 352 Nucleotides)

ACCGCAAAT TTAGCTGTTT ATTAGGTGC AAGTCTCTCC TTCTCTCCCT GCTTCTCTT TCTNCTTTTT CTCCCCACAA  
 ATCTCTCAA AACACATACA AAAAGAGAAA ACTAGAAGCA AGATTGGGTC AAACATGAAG AACACAGAAA GCTATTAAA  
 TAGCTAGCTT TAAAGGGCTC TTTTTCAGTT TGAACAAAAG TAAACGTTT TCAAAAGCAA AACACAGAAA CAGAGCTTCC  
 ACCCAGATTG TGCAACTTAA TGAGAGGAGG TTAGTGCTGA TAAACCCATT GTGAAATCTA TTATAAAGTG ACAGGTTTTT  
 CAAGCAAGGA AATCCAATCC AGTTGGGGT TG

SEQ ID NO:1380: (Length of Sequence = 261 Nucleotides)

AAAAATTTAG TGAAGACGTG AATAGATATT NCTGCAAGA AACATACAA GTGGTCAATA GSTATATAAA AGGTATTCAA  
 TATCACTAAT CATCAGGGAA ATGCAATCA AAACCACAAT GAGTTATCTN CTCATACCTT TNATGATGSC TAATATTAA  
 CGAGAGATAA CAAGTGTITA TGGGGGTGTG GNGAAAAGAG AATGTTGCA CACTCTTGGT TGAAATATAA GTTGGTAGAA  
 CCATTATGCA AAACAGTATG A



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SEQ ID NO:1381: (Length of Sequence = 273 Nucleotides)

GCCACTACAC TCCAGCCTGG GACACAGAGC AAGACTCCCT CCCAAAAAA AAAAAAAA TTATTAGAAA GAGGAAGAGA  
 GAGATGNCAA AGCCTTTTAC AGTTGGGTGT TGGNGTTAG AGACCCAGTA CCCCAGCCTG ACATACCTAC AGAAGCAGTG  
 AATTTACTTA TTTACTGTTA TGAAAAAAT AGATGCTGCC AGCCGTGCAC AGCAGAACT ACTATTGANT CATATGGTTT  
 TAGCCTTCAC CTTTAAATAT GTCTAATTAT ATG

SEQ ID NO:1382: (Length of Sequence = 296 Nucleotides)

CTCCACAGCT GCCACATAGA ACAAGCAAAT CTGACATCAC AGCTCTTTTA AAAATCTCCC AGAATTCTAC ACTGGAATAA  
 AGATCACCCA GTAAACTCAG CTATGTTGAT TCGTAGGAAT TTCTCCTTGG AGTTAATAAT AATCATTAGA AAAAAAATAC  
 AGGAAGAAAT AACTTCCTCC TATTCTTATT GTGATAAATT GTAACAATAG CAGACATTCC TATATAGATC CTATAAGCGA  
 CAAGAGGGAA AATAGGATTT GCAANTTAAG CATCTGGAAT AAATATTTTA GGAAAA

SEQ ID NO:1383: (Length of Sequence = 293 Nucleotides)

CCAAGGACCG GCGCGTGGG CTGCTCTGGG ACCGCTTGT GCGGGGCTGC CGCGCGACT GGTACGGAGG CAATNACCGC  
 TCGGTCTCT GCTCTGACCA CTTTNCCTCA GCGTGTCTT ACCTCTCTTC GGTATCCAG AAGAACCTGC GCTTCTCCCA  
 GCGNCTGAGG CTGGTGGCAG GCGCGTGGC CACCTGCGAN CNGGTGCCCC CCGCGCACC TAAGAGGGGA GAGGAGGGAG  
 ACCAAGCAGG NCGCCTGGAC ACGAGAGGAG AGCTTCAGGC AGCCAGGNAT TCT

SEQ ID NO:1384: (Length of Sequence = 378 Nucleotides)

GGTGGTTTGG ACATGTAGAA AATAAGATGG AAGGCTGAAC TAGGGCAGTG GTGTTGGCAA ATAATCAGAT TTCAGGAATA  
 TCACAAAGTG AGNGCCCCG GATTATGAC CATTTTATG TAGGAATAAG GGAGGAGCCT AGGATGACTC CCCCAGTTT  
 CTGGCTCGAG TAACTGGGAT ATCAACAAGT CATTTAGCAA AATAGAGAAA ATAGGAGAAG CAGCAATTG AGATAGAGAT  
 AGAGGCAATA TAAAGNNITA TATATTGACC ATGTTAAATC ACCTAAATTC AGAAAGTTGT AGAAACTTG GGTCTGGANC  
 TCAGGAAAGA CACTGGATAT GTAGATTGG AAAGTTATCA ATCTCAAAGT GATTGCTT

SEQ ID NO:1385: (Length of Sequence = 204 Nucleotides)

TCATTCTTGG GTGTTTCTCG CAGAGGAGGG NPTTGGCAGG GTCATAGGAC AATAGTGGAG GGAAGGTCAG CAGACAAACA  
 AGTGAACAAA GGTCTCTGGT TTTCTAGGC AGAGGACCCC GAGGCTTCC GCACTGTTTG TTTCCCTGGG TACTTATGAT  
 TAGGGAGTGG TGATGACTCT TAACGAGCAT GCTGCCTTCA AGCA

SEQ ID NO:1386: (Length of Sequence = 238 Nucleotides)

CCCCATCATG GGCAGCCAGA GCTCCAAGGC TCCCCGGGGC GACGTGACCG CCGAGGAGGC AGCAGGCGCT TCCCCCGGA  
 AGGCCAACGG CATGGAGAAT GGCCACGTA AAAGCAATGG AGACTTATCC CCAAGGGTG AAGGGGAGTC GCCCCTGTN  
 AACGGAACAN ATGAGGCAGC CGGGGCCACT GCGATGCCA TCGAGCCAGC ACCCCCTAGC CAGGGTGCTG AGGCCAAG

SEQ ID NO:1387: (Length of Sequence = 295 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTANITAG GCAAGAAGAG GTGTGAGTAA TTGAGGAAAA ACTGACAGAT GCTTTTCTTA  
 ATACCAAAT TGAGCTTACA ATTAGGAAT GAGTATGTGT AACAGGNTAC AGGTGACAGT GAAGATAGAA GAACCAGNT  
 GACCACAGAC TCAATGTGCT CTGTACATC GCACAGTTTA CCCAGCATGA CTTTCTTAG GAGGCCCCCT CCTCACGCTA  
 GAGTAAAGT CCCAGTTAAG TGAAGCCTAC CAGAAGAACT AGTAGAAGAA GCTTT

SEQ ID NO:1388: (Length of Sequence = 201 Nucleotides)

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GCTAGTNATC TCTCAGACAC TTGGTCGSTA GAAAAGATCC CGCACCATCC TCCAGGNTCC AATGGCCTTG GAGAGAGGGC  
 TGCAGGSCCC ACGGNCATTG CTGACTCTTT AGAACGTGCT GACATGGAGC CAGACCACTC GGCCCTGAGT GCGGCGAGGA  
 CCTTTTINTT GGATGTGGAG GAGCGCGGGC CGGAGCATTG T

SEQ ID NO:1389: (Length of Sequence = 399 Nucleotides)

GGTGCCCTGT TATCTGTGTA AAGAGCCACT TATGACCTCA GGTGCTACTT AACCTGGGGG GCAATTGTTT CTTAGGCCTA  
 GCAGATGTTT GGGATGACAC TAAAACTCA GTGGTGAGAT GATTCCCTTA GCAAGATTGC TGAAGTTAGG TTTAGACGTG  
 GGAGGGTGGG TATGTGAGCA ATGGTGCCAA TAGCGGCTCT TTATTTCCTT TGTCTTCATT ACTGCCATCA GGAAGGTGCT  
 ACTGGCCTCG AGCCAGGGTG TTCATAATCT GGCCTTGGGT TAACCAGACA AATAGAACTT CTTTCTCTAG ACTGTTGGCT  
 TINTGGAGGT TGGCAGCCTC TATCAGAGN TAAATTTCC CAAATCCATT TACCCAGTAT ATTCACTACA ATTTTTTCC

SEQ ID NO:1390: (Length of Sequence = 381 Nucleotides)

GGATTGAGGT GAAGATACAA CAAAGAAAGG AAATTGAACG GAATTATTAA GAGGGTCAAG TTTGATAGGC AGATAAGACT  
 AGGTATCAGC AAGACATTTT AAACAAAAGG AACATTATGT AATTTTTTAA AAAAATACAT GAAAATAATA TTTAANCAAG  
 GAAGGAATAT GATAAAAGAN GGATAGTTAG TAAATTTGG ATAACATAAA GATTATTGAA TCTCCAGTCG TCAAATTTAT  
 CCTAAACTAC TGGGGAGAGG TCTCATGTCA GATTTTGATT ATCGAGAAAG AGGGGTCAAG AGTATAAGNG AAATTCCTTT  
 TTGTTTTGAA CTTCCAGTGT CCCNCTATTG TGGGCAAATA TCAAATTCAA ACCAAATATA C

SEQ ID NO:1391: (Length of Sequence = 327 Nucleotides)

GAAGAAGTCC TTCTTAAGCA AGGCTTACAG ACTCCAGGG AGAACAAAT CTCTTTATCT CTCTGGGGTT TTAGGACCTT  
 CATCAAGTCA TAGAATTGAA ATAGAGAACA TCAATTGTNC AACTTTTTTA TTTTAATAGT TTTTGTAGTA CATAAAATC  
 ATGTTATGAA TTATTTTGTA GTTTTAATTA TAACTTTTT AGCACTTTTA CCATATTCTT AAAAATTAAA AATTATGAGT  
 NCTGAGAAAG CAGTGAATC ACATATAGGT ATTTGATTAA CTTTATGTG ATCTTTTACC TCAAGCTAAT GTTCTTAAA  
 ATCAAGG

SEQ ID NO:1392: (Length of Sequence = 223 Nucleotides)

TTTTTTAATA TTTAAACAA TTTTATTCAT GAAATATGC TGTACAATGC ACTCTACACA GCCTGACAC GGCACACACG  
 CACACGCACA CTCTGACGGC ACGGCCACGG TACACTGCCT ACGATACGG CCGGGGACGC CGCGCCACC GCGCGTCCC  
 GCGGACACT TATAAATATG GGAGAAGGGC CAGAACTNGC GCGGAGAAAG GGGCGTCGGG GTT

SEQ ID NO:1393: (Length of Sequence = 296 Nucleotides)

GAAAGTTTAT TATTTCCCA TGTNCTTTAC ATTTNCATTT GGAAATATCA TTCTGACAG AAATAGNTAC ATTATACCTT  
 CGAAAGCAGA AAGATCTTAA TTAATTAAAA CAGTTTACAT TTACCTTAGC ATTAGGTCTG GCTGGCTAAT TTCAAAGGAT  
 TAAAAATTGC ACCNATTTGG GCCAACTGGG GTCTGAATA ATTATCCNGG GTAAAAGTAT AATATTTTAT ACTTTATACA  
 TTTTGCTTCA TCACACATTT ACITTCACCA CAGTENTCAA CTTACATTT AAAAAG

SEQ ID NO:1394: (Length of Sequence = 281 Nucleotides)

ATCTTTGCAT CCCTGGGACG ATTTCCAGTT GAGCATGCTG AATAATCTTT TTGATAGGCT GTTGGATTG AGTTGCTAGT  
 ATTTTNTTGG GGCAATTTGC ATCTGINTIC ATCAGGGATA GTGGCCTTCA GCTTTCTTTT CGTGTGTGTG TGTCCCTGTC  
 TTGTTCTGGT ATTTGGGTAA TATTGGCCTT GTAGAATGAA TTTAGAAGAA TTCTTTTCTT TTTGATTTTT TTGGAATAAT  
 TTAAGAAGAA TTAGTATTAG TTCTNCTTTA AATGTTTGGT A

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SEQ ID NO:1395: (Length of Sequence = 323 Nucleotides)

CTTTTTTTTAA GATTTCAAAC TGGGTTACAC ACTGGAAAAG GCTGGGTAA GGGCCGAAAT TTAATAAATC TGTACTGATA  
 ACTAAAGGCT ACAGAGATT CATATATTT TTTTAACTTT TAGAAATCAG AGTGCTTATA AAATGGCTGG CTCATGGCTC  
 TGTACCCAG CATCTCTGAC GCGCCTCCT AGCCTTCGTT GGTGAGATAA CCGGNATAG TGATTCCATG CGTAAACAAC  
 AAGAATACTA AACCAATAAA ACTAGCTTAT CATGCAAATA TTANGGCATC TAGAAAGTCA GTTAAATAA TATTGTCATA  
 GAG

SEQ ID NO:1396: (Length of Sequence = 384 Nucleotides)

TGCTCCCGG GTTCATGGA TTCINCCGCC TCAGTCTCTT GAGTAGCTGG GATTACAGGC ATGCACCACC ATGCCTAATT  
 TTTGTACTGA TGCCAGCACT TTCTTAGCAA CCCCAGCTGG TGTCCTAGTA TGCCCCCTCC AGTCCACTGT CTCGCGGCC  
 AGTTCAGCGC TAGGACTTGC TTAAGAGTTT CAGTCTTGT AGCCTATACT GCTTMINACG TTTATTTAGA GATCTAGAGC  
 ACTTTAACCC TCAGTGGCAA GGTGTTGGG AACTTGAGTT CGGACCACTG GGATTGSCAA ATTCCCCTCT GGGCTAGGGT  
 TGCTTTAAAT GCTCCCTTCA CGTGTGGGCA ATCAGCTGAG TTTGGTCCAG TTTTCCTTTC TGCT

SEQ ID NO:1397: (Length of Sequence = 370 Nucleotides)

TTGAGTTTNT TCAGTGGCAT CCCCTGCTCC CCTGAGCACA CACAGTGTTT TCTATTTATG ACTGTAGTGC CAAGCAGAAT  
 TTCCATGTNC TTGCTAGCTG CCCATTCTCA CCCCTCAGGG TCTCATACTT CTCCCTGGAA GCCTCCCAAG CAGTCAATGT  
 GACAGGGACC AAGTATGTAC AAGGCAACAT ATTGGGTTCA AGTGCAAACCT AAGGGAACCA GGGCCTGTTT TTCTAGTTTG  
 GAAGTTTTTC TTTATCTTAA GAAAAGAGAC AGACCAAAC CAAGAAGATC AACATAACT CTTCTCTTTG TCATCAGGT  
 GATGACATCA AGGTACTGAT ATTAACCAGA AGTTACAACA AGAAGGAATT

SEQ ID NO:1398: (Length of Sequence = 307 Nucleotides)

ATCAGCATTG GGTTTTACC AAAGTGATAC AAGTCTGAAG GTCTTCATCA GCAGTCTCCC TCATAGTCAG CGCCATACCG  
 AAGAGGCCTG TCCCTCTCAT AGGGCCTTCC AGCCACTTCT TCCACACAG CCGATTCTIN CTGTGGCTGG GAGTGTGGAC  
 TGATTGTGTA TGATGTGAGA GATCCCTNGG GGTGTGAGCT ACCGCACCTG GCTGAACCTT CAAGGAGAAG TTTGTGCATC  
 ANTTTTCAAA AAATTATGAT ATCAAAGAT AGCTGTGCC TACATTTGGG AAAGATACAA AAACCTTG

SEQ ID NO:1399: (Length of Sequence = 380 Nucleotides)

CTGAATTATT GAGGATGAAT TGATAAGAC AGGTGTAATG AACTGAGGCC GGGCATTAGA CTGAGCAGCT GACTGTCCCT  
 CAGAAACCAT AACCTTGCTA CCCGCACTGG GCATTGTGAC AACTGTTGAC ATCAATGCAG ACTGCAAGTN AGTTGGCAAA  
 GCTGCTGATG TGTTAGCTGA AGTTGTGATG GGATTGGAAG TGACAAATAC AGTTATTTGA TTTGGGGGCA AGGGAGTNGA  
 AATGGAGGAA GAGCTAACAG GTCTTGACAT TACTGGAGGG ATGCTTGGTG CAACGTTAGA ACTGACCTCA CTCAATTCGG  
 GGATGCACAA GGGATGAACA CAGCTCATTT CCGTINAGGT AAGTTTAGGG AATTAGAAGG

SEQ ID NO:1400: (Length of Sequence = 232 Nucleotides)

ATTATAGATA CACACCACCA CACCGGCTC CTCACATTAA AGTGGGNTTA TGACCATGAA CACTTCGTAT TAATAAATGT  
 CTCAGCACAC CCAAGCCTGA AAATCTGATC TAAACCTCCT TAACCTGAAT TCCATCCACA ATCCACAACCT TNCCTGGNAA  
 AAATNTNTCC CAGCTTCTCC TTCTCTAGC CCAAGAAACA GCCTTAACAG CGNGCGATTT CATTCCCTACA CT

SEQ ID NO:1401: (Length of Sequence = 349 Nucleotides)

AAGCTAAATT TATAATGAAC AGATTGAAGA AAAATAAAGA GCTACAGAAA GTTCAGGATA TCAAAGAAGT CAAGCAAAAC  
 ATCCATCTTA TCCGAGCCCC TCTTGAGGC AAAGGGAAAC AGTTGGAAGA GAAAATGGTA CAGCAGTTAC AAGAGGATGT

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GGACATGGAA GATGCTCCTT AAAAATCTCT GTAACCATTT CTTTTATGTA CATTTGAAAA TGCCCNITGG NTACTTGGAA  
 CTGCTAAATT ATTTTATTTT TTACATAAGG TCACTTAAAT GTAAAGCGGT TAAAAGACAT CTTTNCINGC ATTGCCATCT  
 TAATATC AGATATTACG GGATGTTAG

SEQ ID NO:1402: (Length of Sequence = 338 Nucleotides)

GTAATTGCTA TTGATGTTA TTTTAAGAAA TTAACCCITA AAACITTAAT TCCTTAAAC AATCTCAAAC AGAAGAAGCA  
 AAAGCTTGIN CTGTGCTCCA GGAAATAAGA TTCAGCACCA ATGAAAATAA ATTATAGAAA ATCAGAAGAT GGGTCAATAT  
 GAGTGGAAAA AACCTAACAT TTTAATTGTT TTINCTCTCA ATAATTGTGT TGAACCATCC AAAAAAGTAT GATACAAAA  
 TAGCACTATA CTAAGAGCCA GATGACATGT CCTTAAAGCC TTAGCTCTGC AAATTATTGG TTGTGTAACA CTAGGGNACA  
 ACACCTAGNC TCTCCTAG

SEQ ID NO:1403: (Length of Sequence = 381 Nucleotides)

GGAGTCTCAC TTTGTGCCCC AGGCTAGAGT GCGANGGCGT GATCTINGCT CACCACAACC TCCATCTCCT GGGTTCAAGC  
 GATTCCTCTG CCTCAGCCTC CTGAGCAGGT GGGGTTACAG GTGCCCGCCA CCGCACCCAG CCAACTTTNT GTTCTCAGCA  
 GAGACGGGC TTCGCCATGT TGGTCAGGCT GGTCTCGAAC TGACCTCAAG TGATTGCCC ACCTTGGCCA CCCAAAGTGC  
 TGGGATTATA GGCCTGAGCA CTTCACCTG GCCTCTAAGC TTAATCATTT CTAGGCTTTT NATTTAAAGT GAGAAACATG  
 TGACTCTTTC CTTTCATTG GGACACTTTA AAAGGGGTTA TTAAATTGAC CCTAATTACA A

SEQ ID NO:1404: (Length of Sequence = 325 Nucleotides)

AGCTCATCAG CTATCATTTG TGTTAGTGTA TTINATGTAT GGCCAAGAC AATTCINCTT TTTCCAGTGT GGCCAGGGA  
 AGCCAAAAGA TTGGATACCC CTGACAGGAT TCCAGGATTC TTTTGTAATT NCTCAGAGGC CCTCTGTGCA TACTCCGTAA  
 GGACTATCCA CATTCITTTAT TACTTTCAIT GGCAATAGGT ATAAATTTT ATTTGTTGNN TATTTTACTG NAATGTTACT  
 TGTTTTTGCT TATTTACTGA TTGGGTGGGA GGAAGTCAA GGATGAATAA ATCTAACCN TTTTAAAAAG GAAAGGCTAA  
 AAATA

SEQ ID NO:1405: (Length of Sequence = 349 Nucleotides)

GGATTATGAC TGAACGTCCT CAGCATGTTG GCCTTCACCC CTGGCGGTGG CTGGAACACA AAGATGCGGC CCGCACGGAG  
 CAGATTCACA GGCACCTTGG GGTGATCTC CATGGTTAGG AAGAGTCGGA AGCAGGCATG CGGCTGCAGG GAATGCAACT  
 TCTTCTCCAG CTGCATCAGC CACCCTGGGG CCAGATGCAC ATTCTTCAGC ATCACCACCC TGCCCGANTT TACAAGCGGT  
 GTTTTATTGC CTTATCTGCT TNGTTAAAGC CTTCTTCAGA GCGGATTGCA ATTGAAGGGA TCTTCGGGGT TCTNCTCGGC  
 TNCAAGGTC CTCGACAATG TTCCCTTG

SEQ ID NO:1406: (Length of Sequence = 392 Nucleotides)

GGACTGCCCG TTTGTTTATG AGACAGGGTC TCATTCTGTC ACTCAGGCTG GAGTGCAGTG TCATGATCAT GGCTCACTGC  
 AGCCTCGACC TCTCAGGCTC AAGTGATCCT TGCACTCTCA CCTCACGAGT AGCTACGACT ACAGGTATGC CCCACTATGC  
 CTGGATAATT GTNCCTTTTT TTTTTTGGT AGAAACAGGS TCTCATCTG TTGCCCAGGC TAGTCTCAA CTGCTGGACT  
 CAAGTGATCC TTCCAACCTG GCCTCCCAA GTGCTGGGAT TACAGATGTG AGTCACAATG NCCAGCATGG ATTGTCTTTT  
 TCAGACCCAG ACCAAAGAAC AGGACTTATT TGTCCTAAGA CCAATCTAGG NAAAGTATAA GCTGTGTGT CA

SEQ ID NO:1407: (Length of Sequence = 362 Nucleotides)

GTTAATTGGG NTTCAACAAG AATAATTTCT CCACAACAAA AACCACAAC TGAAGNGAGT TGAAAAGNGN TCAATAGTGG  
 AAACAGTCGC CTCAGTACTT TTNCTTTCTG GNTTTCATCT CTAGAAATTT NAAGTGTTN AGNCAGAGTC CACCCTTTG

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GCAAGGCGNG AACCNATGAA TGGACTCCTT GTGIGAATTG TTGCATCTTC TTCCAAAGCA GGTTCATCAA GACTTTCACA  
GAGATTCATT TTTNTTGAGA AGTAAGGGTT AATAGGAGGA TAGAATTGG TTCCNAATCT AGTGNIAAAA GTGTCCAAGC  
AAATCAAAAA GTAAGATATT TTAGGGGCCA TACCCACATC TT

SEQ ID NO:1408: (Length of Sequence = 388 Nucleotides)

CCCCGAGCA CCACGAGCTG ACCTCGCTCT TCGAGTGTCC GGTCTGCTTT GACTATGTCC TGCCTCCTAT TCTGCAGTGC  
CAGGCCGGGC ACCTGGTGTG TAACCAATGC CGCCAGAAGT TGAGCTGCTG CCGGACGTGC AGGGGGCGCC TGACGCCAG  
CATCAGGAAC CTGGCTATGG AGAAGGTGGC CTGGGCAGTC CTGTTTCCCT GTAAGTATGC CACCACGGGC TGTTCCTGA  
CCCTGCACCA TACGGAGAAA CCAGAACATG AAGACATATG TNAATACCGT CCTACTCCT GNCCATGTCC TGGTGCTTTT  
CTGCAAGTGG CAGGGGTCCC TGGGAAGCTT TGATTGTCCC ATNTNAATGG AACGGCCAC AAAGAGCA

SEQ ID NO:1409: (Length of Sequence = 348 Nucleotides)

CAATGAATC CTTAAGCTTT GTTAATATGA GAATGTCTT ATCTCTCTT TATTTCCAAA GGACAGCTTT GCTGGTTAAA  
ATATCTCTGG TTAAGTTTTG TTTTATAGTAC TTAGCATATA TCATTCCACT CTCTCCTGGC CTGTAAAGCC TCTGCTGAAA  
GATCCACTTC TAGCCTTATT GAAACTCCCT TCTATGTTAT TCGNTTCINC CTCTGCTGC TTCCAACATC CTGTCTTTGT  
CCATAATTTG TAACAGATTG AATATAATAT GAATTAGNCC TCTTAGACT GAATCTCATT GGAGNCTTTT CACCCTTCTT  
GTTTTGGGT ATTTAINTCT TTTACAG

SEQ ID NO:1410: (Length of Sequence = 370 Nucleotides)

GACTATTTAT TCTGCCCTAA ATCAATGGCA AAATAAGTCAA GATGACATTT TGTGAATGTA GACTATGGAT AACTCCTAA  
TAGATTGATG TAGTCATAAA AGGGGGTCAA GTAGATGTTT TNCGTGTTATG TAAGCAATAA TTTTCCCGTG TCTTATTGAG  
TATGGCTAGC GATTATTTAT TACATGCTAG ATGGGTTCTT TGCATGTGGG TTCCATATAG GTGCAGAAAT TTCTCAGCC  
ACTGGAGGGA TTTCGACCAT ATTTGTCATT TGGATGAGCT GTATTAGAT TGAAATCTAC ACATCATTTT ATTAAAAATT  
GTGCCCTAGA AAACGCAAAG CTNTGCACA ATGGGATTA AAATTATGGG

SEQ ID NO:1411: (Length of Sequence = 385 Nucleotides)

GTCTCAAACCT CCGACCTCA GCGATCCAC CCACCTCAGC GTCCCAAAGT GCTGGGATTA TAGGCGTGAG CACCGCACCT  
GGCCTATGAG TGGTCTTTTA ATTAGGAAAT TTACATTTTT ACATTAGTGA GATTGGTCTT TTGGGCTATT GTACTTTTTT  
TTTTTTTTTT TTGAGATGGA GTCTTGCTCT CTCACCCAGG CTGGAGTGCA GTAGTGCAAT CTGGCCAC TGCAACCTCT  
GCCTCCTGGG CTGAGTGAT TCTCTGCCTC AGCCTTCCAA GTAGCTGGGA CTACAGGCAT NTGCCCGC ACCTGGGGTA  
ATTTTNGTGG TTTTATAGTAG AGAATGGGGG TTTTGCTAAT GTTTGGCCAG GCTTGGGCTT GAAAT

SEQ ID NO:1412: (Length of Sequence = 337 Nucleotides)

CCATTGAGAT TCCTCCGGG CCTCCTCGCC CCATTGCGA CAGATTTGCT ACCTGCTCCA GCTCAGCGAC CCTTCCCTCT  
ATGATGAAGT GCATTGAAGA GAACAATGGT GTGGACAAGA GGATCAGCAG GTTTATTCTC CCCATCGGGG CCACCGTGAA  
CATGGACGGA GCAGCCATCT TCCAGTGTGT GCGCGGGTG TTCATTGCGC AACTCAACAA CGTAGAGCTC AACGCAGGAC  
AGATTTTCAC CATCTAGTG ACTGCCACAG CGTCCAGTGT TGGAGCAGCA GCGGTNCCAN CTNGAGGGGT CCTCANCATT  
GCCATTATCC TGGGAGG

SEQ ID NO:1413: (Length of Sequence = 367 Nucleotides)

ATAAGTGGAG TGAAGAAATT AATGCATAGT TCAAGCCTAA ACAATACAAG CATCTCAGC TTTGGAGTCA AACTGAAAA  
TGAAGATCAC CTGGCCAAGG AGCTGGAAGA CCTGAACAAA TGGGGTCTTA ACATCTTAA TGTGGCTGGA TATTCTCACA

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ATAGACCCCT AACATGCATC ATGTATGCTA TATTCCAGGA AAGAGACCTC CTAAAGACAT TCAGAATCTC ATCTGACACA  
TTTATAACCT ACATGATGAC TTTAGAAGGC CATTACCATT CTGACCTGGC ATATCACAAC AGCCTGCACG CTGCTNATGT  
AGNCCAGTCG ACCCATGTTT TCCTTTCTAC ANCAGCATTG GACGGTG

SEQ ID NO:1414: (Length of Sequence = 360 Nucleotides)

GTATACAGCG TGGTCCAGCC ACCCGACAGC GAGATGGGCA TTTTAAGAAA CGCTCTCGGC CAGATCTCCG AACCAGAGCC  
AGAAGGAATC TTTACAAAAA ACAGGAGTCA GAACAAGCAG GGGTTGCTAA GGATGCAAAA TCTGTGGCCT CAGATGTTCC  
CCTCTACAAG GATGGGGAGG CTAAGACTGA CCCAGCAGGG CTGAGCAGTC CCCATCTNCC AGGNACATCC TCTGCAGCAC  
CCGACCTGGA GGGTCCCGAA TTTCCAGTTG AGTCTNIGGC TTCTCGGATC CAGGCTNAGC CAGACAACTT GGGACGTGCC  
TCTGCATCTT CAGACAGAAT TACTAGCCTG CCTNAGGAAA

SEQ ID NO:1415: (Length of Sequence = 314 Nucleotides)

CTCAACACA GCATTGAAG TCTTAATATT TTAGTACATA CTATACTATC TCINCTTACA ATTGTTTTTT GTTAAAGAAA  
CCATGTTTTT NATCTAAAG AGTTTCCTTT ACTGTGGATT TTAGTGATTG CATCTTTGTT GATGGGTTAA GATTGTCCNN  
ATAGCAT TAGTNCITTC AATGTGCTGT ATTCACTGCT GCCTCTGGGC TCCTAAACTG TGGAGGGCTG TTTGTCCCTA  
TAAATGG GGACAGATTG TCCTGCTTTT TAATTTTCAA TGCTGACTT TTACCCNCTA ACTTTTCCGT AGAT

SEQ ID NO:1416: (Length of Sequence = 370 Nucleotides)

TTCCATTTTT GCTCCTTCTC AGGATAATAG CAGACCGGTG ATCACAACCT TAGTTTTGAT GAGATAACCT CCTTATC...  
TAAAAATGGT CTCTATTATT TTCCAAGAGA AGACCACTAA AACTAAACA CCTGCCTTGA TCTCAGTGTC TTAGATGTTT  
TCCTGTTTCT CCTTTATCCT AGCAAACTCC CCAGGTGCT ATTCTTATTC CCATTTTATA GATGGGCAAC TGGGTAAGAG  
AGGTAAGCTT GGTGAGGTCA CTGAGATAGT GGGGAAAGGA GCTTGGTTCA CATCAGGTAT GCATTCCCCC AAGGTTCCAC  
TGGGGCATCT GAAGGAAGGG GTTCTTGAA GTGCAAAATA TAGGGTACTG

SEQ ID NO:1417: (Length of Sequence = 365 Nucleotides)

GACTCCTTCG CCAAGGAGC CATCAGCACC AGTTGTTCCA GAGCAGCCAC AACACCAGTG ACCTCCCTTC TGCTTCCGGC  
CAATCCCGAC AGAGCCTCTT CCCGAGTCTT GAGCTCCTGG ATAGCTGCCT CAATAAAGCA GGACTCGGGA GTGTGCTTCT  
CCTCTGCCAG CTGCTGCTCT AGTGCTACTT TCTCCTCCAG AACTACCCGG TGCAGCACCT GCTCCTTAGA GGCCAGCAGC  
AACTTGGAGT ACTGGCTGTG CTGTTCATCT CTTAGATGAA TGGGATGGTC TACATTCATC CATTTGGGAT TTTGGGCAAA  
AGCCACCAAC AACCCCTTTT TTCCCTCTT CAATCAAGCT GCAAT

SEQ ID NO:1418: (Length of Sequence = 354 Nucleotides)

CCAAATCCTT AAGTTTACAA AGCTGTTGGA AAACCTTTGTG TCTGATTTC AACAAATCAG CTTTGTGTTGA AAGATGAGCC  
AAGCTCACAG AACTAAATT TTATGTCATG CCATAAGCTG GAGAGGAGCC ATTTGGCTAC AGCTCGGGAA CTTCAATTGAG  
GAGCAAATGA AAGGCACATG GACGAGCAG CTGGTGCACT TCATGTTCTT CCTGCCTGTG AATTGAATAC TGCTCTGGTA  
GCAGTTTTGG GTCGGTCAGG AGCTCAAGGC TGGTTTGTGT GGCTGACTAC GGATGAGCAC TGAAGTTGCC TCAAGAATT  
AAGGGGTGTC CACANCAGCC TCTTGGGGTC TTTT

SEQ ID NO:1419: (Length of Sequence = 363 Nucleotides)

GTGGAAAACG TGGAAATGAT GTGGCCACTG AAAGAAATTC AAGACAACCTG AAACAACCTGC AGATTTCCAT TTTCAGCTCG  
TGTTTTCTTA TGAACAATAA CATTCAGAA GGGGAAATAT CAGAAAGTTG ATTGATTTTT AACCCAAAAA TAGAACTTTT  
TGTAAGCTAG GAAAGCATCT AAAAATTAACA AGAATACAAA AATGCACCTT TGTTTACATT TGCTCTATTT AGATCTTACA

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AGAGATTATG TCTTGAATCT ATCCTGACTT CAGCAAAAGA CAAAAGAACG TTGAAAACAT CCTATTTCCA AATCGTTTAC  
AGGAAGTTAC CTAAGGAGNC TGACAGATTG AACGGCTGCT ACC

SEQ ID NO:1420: (Length of Sequence = 326 Nucleotides)

GAAGATTTTC TAGAAGCAAA TAGTGCCACC ATCCGTCATG AGGNTCTGTT TCTATAACGC TTGINTGTCT TTNAGACTAC  
GTAGGTGGTA GCTTATGAGT AGTAATGTNC TTTTGTTAGT AAATGTCACC AAATAAGCAA ATAAGAGAAA CATGAAGGCC  
AAAACTGTIN TTACTATTCA GGAGAAAATG GACGGTTTAG CAACAATACA ATGTAGACTT CAAAATATGA AAAATCAAGG  
AAATINCTGT CATGTCTTT AAGGGCCTCC AGAGAAGTAT TAATTTGTCC TTTATGTGAA TTTAATGAGA TCATGTGAAA  
TGATATG

SEQ ID NO:1421: (Length of Sequence = 294 Nucleotides)

ACCCAGTACA GGTACTCTCA CAGGAGGCAC TCAGCAGGGA TGTAAGTACA GCAGGTAAAG NTCCACCTCT NTCCCTGCCT  
GNCCTGGGA TCCAGTATTG GCCCATGTAT CINCCTCAT TCCCTCAGGCT TCCTGGACTT TINTTGGAGG GAAAGAGGAA  
CAGAAAGAGG AGCAGGCAGG AGAAGCAAGA GCTCCCGGG GCTATGAAAG GTAACATACC TGGAGAGTTT NGGGAGACGG  
CGGCTGTNA GAGACAAGSG GAAGAGACAG AAACAGGAGT ATTCTAAGAA GCAT

SEQ ID NO:1422: (Length of Sequence = 306 Nucleotides)

GAAGGGCATA TTTAATAGCT GCTGCAAACA TATGGAATAG TGCTTTAATC AGTGGTGAAC AAGAAATTGC CTGTGTGTGG  
TTATAAAAC AAGGGACATT AATGINCTTG TTCTTGTTACC ATAGTAATGT GNAAAAAAA ATAGTGGTTG NAATGGTGT  
TAATTTGTAC AGTTTGTGTC AAAGTAGAAT GGGNCAGATA TTTTGGTGA TAGGCTTTTG TCTTAGTTAT AAAAATTAGG  
NCATTTGGTA TGATAAAGGC NGAGAATCTT AACAAITGGG CACTGGCCCA GAAAATTNCA GGGTGC

SEQ ID NO:1423: (Length of Sequence = 274 Nucleotides)

TGTGTGTGTG TGTGTGTGTG TGTGTGAGAA ATGGGGAAAG ACTGGTCTAG ATAATATTTT AGGTACCTTC CAACACTAAA  
ATGSTATGAT TCCAGCTTA CAAAAGCAA ACTATTTTAA TATTCACCAC TCAATATAGT GTATCAAGCT CTCGGTTTAT  
GTTAAGGGC TTAGGGNACA GCAGCAACTA TTCTGTGGCA ATTAATNCAA AAATCATGT TACCAAAAAG GCATGTTTAG  
GNCCTGCAGG ATAGTGAAAA AGCAAGAACA GTCT

SEQ ID NO:1424: (Length of Sequence = 297 Nucleotides)

GGAGGATTAC TTGAGCCGAG AAAAAAAAAA AAGCCTCAGG GGTTTCGGTG AATGTTGTGT GGACTTCCGT GAGAACAGAC  
GTTTGATGTG AACTGANTTC AAGGCTGATA CAGCCAGAA CCAGGNACAA GGTGAGAAAC TGCTCGTTTC CGGGAGGCAG  
GACTTCCTAA CCGGGAGGCA CTGCAGTNCA CTTTCTGAAA CAGGTTTGA GGATAGGGAA ATTCCTGNCA GCCCGGGGG  
ATCCACTTAG TTTCTTAGNA GCGGCCGCCA CCGCGGTGA AGGCTCCAGC TTTTGT

SEQ ID NO:1425: (Length of Sequence = 276 Nucleotides)

ATTTTTTCAA GGATGGAAAG GTCAGAGAAA AATAAATAA AACATCTTTC AATAGTCTTT CCTGGTAAAA GCAGCGTCTC  
TNTGGGCTGG GGAGTAAAGG GTGTGGGCA AGGGGAGTGG GGAGAGGCTG TAAACCTTCC CCCAAACCCC AGTTTTAGAT  
CCTTTGGTTT CCTTCTCCA GAAGATGGNC AGAAGGGCAT NGTGGGNAAC AGCAGGGNGG AAAATATGGT GATGACAAAC  
CCCAGATGAT CAAGGGGCTG ATGCTCCTGG GGCCA

SEQ ID NO:1426: (Length of Sequence = 295 Nucleotides)

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TAGTGGCATA TGGACCGGAA AGGGTTAATT TAAAGGGGGG GAACCTCAAA AGTTTTTTTA AAAAAGAAAC TTGTCTGCCA  
CAGTATGTTA CCAGTGTTAA CCCTTCTGCC AGTTAGCAAA CTTTTCCTT AAGCCTTTTT CCTCTAGGAT ACTCCCCATG  
TTTCGGTAAT CTGGGGCATA CATTTTTTAA GATGGACCT CTTCGCTTG TTTTGTTC ATGCTGCTGT ATGTCCAAGT  
ATTGTTAATT TCATAATAAG ACAAGAGTTG CTTCTTTTT TAATTCCTTT TTCCC

SEQ ID NO:1427: (Length of Sequence = 207 Nucleotides)

TCAGGAATGA TAGTATCTGG GATGAACCT TCTTTAATAA GATTTCAGGCC AGTNTGGTG GGTGINTGCG GATGATTGTT  
ACTGGNGCAG CCCAGCATC ACCAACAGTT CTGGGAATTT CTCGGGCAG CTCTAGGGTG CCAGGTTTAT GAAAGGTTAT  
GGCCAACTG AGTCCACAG CTGGATGTAA CCTTCACCA CTCCTGG

SEQ ID NO:1428: (Length of Sequence = 223 Nucleotides)

TAACATCTC TCCAACCTCC CCAGTCCCA TCAGTGTGA GAAGGAATCT AGGCCAGCTC CTGGGAGATG CCAGTTAAGC  
CGCTTTGAAT CCTGTGCTT TCCAATTGNC CCTTATAGCA GTCGATGTCA GGGATTGGGA CAACTTTCAA AACAGTCCA  
TCAAAGTCCC CATGGGCACT AGGGGCTCTG GGAACCCAGT GTCGAGAGGC TTAGAGNCAT TGC

SEQ ID NO:1429: (Length of Sequence = 222 Nucleotides)

AAAACCAAGG AGCAAAGGGG AGACAGAGAG AAAAGTGGGA TGGATTCAAA GACATTGCAA CATAGAACTN ACCGAAGTGG  
CTGTINTGAG GTAAGGNGG CAGGATGACT CACAGGTTT TGGGATTATG TGCAACAGGT GGAAGGTGAT GCCATTAGCC  
AGAATAAGGC TGTAGGCTNA AGGGGAGTNA AACTGGTTCT GGGGGTATAA CATTGATAGG CC

SEQ ID NO:1430: (Length of Sequence = 246 Nucleotides)

CAAAATTTCC TGTATCTTT CATGGGTTT CTTTGTITG TTTTGGTAAG AACATTTAAC ATGAGATGTA TCTTINAGTT  
GTGTGTGG TTGANTTTT TTAGATACAT AGTCTCACTC TGTTACCCAG GACTGGAGTG CCAGTGGACA TGATCCACAG  
CTCTGACA GGCCTCAAAC TCCTGGGACC CAAATGAATC CCTCCACCT NCAGCCCTCC CAAGTAGGCT AGGGACTACA  
GATGTG

SEQ ID NO:1431: (Length of Sequence = 364 Nucleotides)

CTTNCCTCTC GATGATGCTT CTATAATTT GCCCTTTAAC AGAACTTTC AAAAGGGAAG AGTTTTTGTG AATGGGGGAG  
AGGGTGAAGG AGGTCAGGCC CCACTCCTC CTGCATGTT TACAGTCATT GGAATAAGG CATGGCTCAA ATCGGCCACA  
GGNCGGTA CTTGTGCCC CAGGGTTTG CCCCCAAGTG CCTCCATTIA AAAGCATTAA GGCCGGTACG GCATCTTCAA  
AACAGAGGGC TGGCATTGGA GGAAACCTT GCTGCTTTAG TCCCAGTAGG GTATTTGAAC CCCGNTATA TTTTAAGGCA  
TTTTAAATTC TCTTCCCCC ATTTTATTGA CTTTGAACAA TTAA

SEQ ID NO:1432: (Length of Sequence = 208 Nucleotides)

GTGAGTNAAC ATGGATGGAA ACAAATTATT AGGTGTINCA AAGTGAAAA CACCAAAAT AAGATTATAA AAGAATGTCA  
GGTATCCATA GAAAAATATT AATAGGTCTA ATACATATGT AAAANTTGGC GTCCCAGGGG GNAGAGACTG NAAAGTTATA  
TTTINATGG CTGAAATCCC CCAANTTA ACATAAAGCA CAACATT

SEQ ID NO:1433: (Length of Sequence = 274 Nucleotides)

GGAAGGTTTT TAATGCATGA AGTATACTTG TGATCCTGGA GGTGGAAAA GATTCACTAA AGATAAAGTT TGGCAAAAA  
GATTCTNCC CTAGGATTG GGGATATGTA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCTT CATTTTTGT



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CCTAGATTGA GTTATCTATC AAGAATCAIT CATTCCTCT CAGCCCTTGC AACTGTTTCC NATGACTTTG GACTTGGCCA  
TGCAACTTGC TTTGGCCAAT ACAATGTGAG TTAA

SEQ ID NO:1434: (Length of Sequence = 249 Nucleotides)

GCTCCATAGG TCTAAGTTTG ANCTTTTCTA GAAAAGGATT TGCAGGACGA TCTGACGAAT CTGCGGCTTC CAAATTAGTT  
CCAACAGTTC TAGTATTTTT TTTTTTTTT TTTTGACAGA AGCAAATAAG TAAGTTTAC TTTGTGATTA AAACAAAAGT  
GAAATGCATT TAGTCCCAGG AAATGNCAT CCTTTCTGCA TCTNACTTTT TTTTGCTGTG ACCTCGAGNT TCTCTGTCC  
TCTTCAGTT

SEQ ID NO:1435: (Length of Sequence = 201 Nucleotides)

GAATGGGGCC AATGGCACTC ACTGINTCTT CAGGCCCCCA CGGACGGCAT GCCTGGGGAA GCCTAGTCTA CTTACCATCA  
GCACGTTGAT CTNTACACA GCATGGAGCC ATAGTTTACA AAGGACCACG GCAGGTCAAG GACAGGCCAC TAAACTTTT  
GGTGCTGGGC ACATNACCCA CCTCACCAN CATCAAAGAC A

SEQ ID NO:1436: (Length of Sequence = 312 Nucleotides)

GGGAAAGGTA TATTAACCTT CIGCATCAA GATGTAACAG TCATGGGGTC TTGGTGGCCA TCTGGTCTGA GTTAGGTACA  
GGACAAGAAA GAGTCAATTA ATCTATAATA AAGATCAATG ATTGAAAGAA GGGAGATCTG GTCTCTGTCT CTCCTAGTCA  
TTTACAGAAC AAGAGCAATG AGGAAGACCG TTATGCTATA ATCTAAGNAA CAGAATTGGA AATATGCTAC TGACTCAGTC  
TCCAGGGGCT TAACCTCCCC CTTGGCATAA TAAATTAAAG GAGTCCIAAA ATTTTATTTT CCTTACATT GG

SEQ ID NO:1437: (Length of Sequence = 294 Nucleotides)

ATTCCAATGG TAATACTAAC GAATTGTGCT ATCTAAATAT TGGATAGTAA AAACGTCAAC ATTTAGAAAA TGTATATCAC  
ACAGGGAACC AATATTTTNC AAATTATCCA CATCTAATAT TAGGCAACCA CGCGCAANAA AAGACACGTT CAAAGTACAG  
GAGAAATGGA TGGATTTTAA TGTGAGATAG TACAAGANGT TTATTGATAT AGTTTCAAGA TTCCATATG TAATAAACCT  
TTAANGAAAC TTTCACTTCT TGAGTTTGG GTATAGGAAT CCAAAAAAAA AAAA

SEQ ID NO:1438: (Length of Sequence = 311 Nucleotides)

GGCCCTTTGA CTTTGTAAT GAGCAATG AAATGCCGCC TACTGATGCT TCTNATGATC AGAACTCTTT TTTAATAAAA  
TAAATAACAT AAATCGTTGA ACATAATGTT CCGTTTGAAT GCAAANCAA AAAAAATATG NAAACATTTT GNTAAAAATT  
TTTCCNGNTA AAACCATGAA CANTGGCTAT GATGAAGGTT ATTACATATG GAAAAAAAC TCACACAAGC ATATTTGNAT  
TTGGCTTGAA GGAACCCAT CATTAAATGC AANGCTAGGG ATTCTTTTNG AAGCAGTTGA TCCTCAGGTT T

SEQ ID NO:1439: (Length of Sequence = 265 Nucleotides)

CGTGACACAG TTGAAGGAGT CGCTTAAAGA AGTCCAGCTG GAGAGAGATC AATATGCTGA ACAAATAAAA GGAGAGAGGG  
CCCAGTGGCA GCAGAGGATG AGGAAAATNT CGCAGGAGGT TTGCACATTG AAGGAGGAGA AGAAGCATGA TACGCATCGG  
GTAGAGGAGC TNGAGAGGAG CTNTCCAGA CTCAAAAACC AGATGGCTNA GCCACTGCCC CCGGATGCCC CAGCAGTNC  
CTCTGAGGTG GAGCTNCAAG ACCTT

SEQ ID NO:1440: (Length of Sequence = 241 Nucleotides)

GTTTACTCT TGTGAAGATA GCACTTAAT CCTAAATGAG CATGTAACGT GTGACAGATC CTATATCAGT TTTAATAATT  
GAAGCAGATA GTAATACTA GATTATTGAC ATTTTNGT CATGTGTTCA GCTATTGCTT CAACTTGCT CAAATTATAC

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TTGGNATTTT ATAGTGTTTT ATTTATTATA TACTCTNCTT GTAATAANNT GGTAATCTAG TTTCCAGAAT CATGCAAATA  
G

SEQ ID NO:1441: (Length of Sequence = 247 Nucleotides)

GACCCGATA TTCCGGCATC ACATAGATAT CCTCCAGATA AANGGTGCGT CCCTTCCATG TACTGTAGAT GAAATAGTAT  
ATCCCATAGC CCACCACGCA GGGCCCCAGT AGCTTCCCGG GCGCTGGAAG AATCTCTGCT ACCAACAGT GATAGAAAGG  
ATTGINTCCA AAGCCATCTG CTCTCAGGGC TTCTTCACTG ATAGNGTTT TTTTCAAGNA ATAATCCATG CTAAGAATGG  
GGTATTT

SEQ ID NO:1442: (Length of Sequence = 233 Nucleotides)

GATTACAGCC AAGTTCATGA ATACAAATAA AATAGCAATT TCCCTCATTC TCTCTTTTGT TTTCTGNTCA GAGAAATCAG  
GAGATGGGAG CATTATGCTC AGAAACCGAA GAGCTCTTCC AAGAGCTCCA GCTTAGAGTC CAGGCTTCCA GAGCATGCAG  
CCTCCTAACA CGTATGTGGT CACATGTGCA AAGACCTNTA TTACAAAATA TTCAGAGCAG NATTTCTNTT AGG

SEQ ID NO:1443: (Length of Sequence = 288 Nucleotides)

AATAAACAAAT GTGCAGSTTT TTATAACTGA TCGGAAGAAG GTTGACCCNC AGTTATCACC TTTAAAAAAT GGTCTTAGTT  
AGGCTTTCTC CTTTGTCTT TTTCCAGAAG AAACCTGGAG TCTGTCAAT TTACAAAAT ACCCTGTTGA GATTTTCCTT  
GGCTTTGATA AGGGTGAATT CACAGATTAA TTCCGAAAAG AATTACGGC TTTCTAATCA AATTGTTCTT TCCAGGGGNT  
TTTGTGNTA TTTAGGNCCT TCTAAAGGTT AACCTAACT TTGATTAT

SEQ ID NO:1444: (Length of Sequence = 208 Nucleotides)

GGAAGTGAAT CACAGGGCCA AAGCCCCCTT TNCCTCACGT GAAGCAACTC AGTAAGATGG CCGTGCAGTG AAGCCTATTC  
CCACACACT CGGCACTGAT GGAGCAGTCT CCAAAGGAAG GCTGAAAGGA CAGCAGGTGG TTGCCTTNGG GTCCTTCTTT  
CCCATANCTT TAGAGTGCCA TTTTTCAGCA ATGGGTAATA GCATCAAC

SEQ ID NO:1445: (Length of Sequence = 239 Nucleotides)

CCCCGGTCTC TNGGACACCA TTTTCTGCCG CTGGACGCAA GGGTTTGTGT TTAGAGAATC AGAGGGATCT GCATTAGAAC  
AGTTTGAAGG TGGCCCCGTG NCTGTATTG CACCTGTNCA GGCATTTCTT TTGAAGAAGC TCCTGTTTTT TCCGAGAAG  
TCTTCTTNGC GGGATTTTTT AGAGGANGAG CAGAAGGAC TCCTTTGTCA TACCTTGTGT GATATTTTAA AAGTGCCTT

SEQ ID NO:1446: (Length of Sequence = 243 Nucleotides)

TGCAGGGAAT TTNTGATGC AAAACCAGGA AACAATTTAT CTCCACTGGG AATACTTTGA AGAAGGGATT AGAGCGGGGC  
TAGGGCAGGG AGGATCTNTA AAAACAATA TTTGCCAAAC TAAAAACACA TAGGCACACA TGGGNATTAT TTTACTTTCA  
ACAAGTTCTG AAAGTAGTAA CAAAACCAGG GAGAGTTAAA AGAATAATTT AACACTNAG NTTCAGGAAT GCTAAAGGAG  
ACC

SEQ ID NO:1447: (Length of Sequence = 371 Nucleotides)

AGTTATAAAT GAACATCTGT TGCCTACTTA ATAGGTCAAT GAGTAGCTGT GACCCATTCT TAATTTGTAT GTAAGCATAT  
TTTTTACATA TTTGTATCTA CTTCAATTTT CTTGAAGCT TGCCAAATG GTACACTTCA GTTTGAAGTG ATGTCTTTA  
TATGCTGTAC CACCTTCTTA AAAATTGAAT TATCTTTCCT TCCACCTAGA TTGTCTCAA AGCATTTGTT TTTGCTGGAC  
TTTCCACTCT TGACCATAAG ATGTAGCAT TCCCTAAGGA TATTGCAGCA CAGTCTAATT CCACTGGTTG TCATCTACAG  
TTAAATCGCA AATAAAAAAT AATAATAAGC AGCAACTGAT TGCTCAAGTT G

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SEQ ID NO:1448: (Length of Sequence = 366 Nucleotides)

AATTTTGTGT CCTGTAGGAA ATGCTTCCTT GGGTGTTTGT ATTATAGCCC AATCCAAGTC ATCCCTGAGA ACATCCCCAG  
 GTTGTAAAGG TTAGTCAGAA GTCATGATGA CTGTCCTATA TAAATATTIG GCCTATTAAAC TAAAATTAGT ACCTTNCCAT  
 TTCTCCNCTT TCTTGGGCGG GGCAGCGGGG GAGTGCAGGG GAGGGGAAAT AGGGAACGTN CAATTGINTT TTAAGTAATG  
 CTCATAAAAT TCTTAGNCAA AGATGATCTT GCCCTCCACC TTGGTGACCC ACCGCATACG GGGTACATCT ATCTGGCCTG  
 TCTCTAGGCC TAGACAGAAG GAACAGGGAG GGTATTGT T AACTTT

SEQ ID NO:1449: (Length of Sequence = 234 Nucleotides)

GTTGTGGGAG GGACCCGGTG GGAGGTAACT GAATCATAGG AGCAGTTTCC CCCATGCAGC TGTCNGGATA GTNAGTTTCT  
 CATGAGATCT GCTGGTTTTA TAAGCTTCTA GTGTTTCCCC TGCTGGCACT CATCTCTCTT CCTGCCACCC TGTAAGAGG  
 TGCCCTCTGC CATGATTGTA AGTTTCTCTGA GGCTTNCCCA GCCATGCAAA ACTGTGAGTC AATTAAACCT CTTT

SEQ ID NO:1450: (Length of Sequence = 220 Nucleotides)

GCTTTTNCCT TCCCTGTTTT GTTTTGTAAC CTAAGGAAGC AGAGCCTCTG AGACCACACA CAGCAGCGTC GCCCGTCCCC  
 AGAGGCACCC CGGCCAGGAC GGCAGGAGA GGAGACCCCC GTTCTGTCAT GCNCTGTCGC CCGCCACGG TGNCTCTCGC  
 AGGGTGAGGC AGGAGGGTGG GTGGAGGCGC CACTGNTCCT CAGCTGGAAG GGCGGGGCAT

SEQ ID NO:1451: (Length of Sequence = 403 Nucleotides)

CCGCTGTTC CTAAGGCCT GATTAAACTT GCCTTCCTGT CCTCCAAGAC CAGATGATGA TTATTCTCCA CCGTCTAAGA  
 GACCAAAGGC CAATGAGCTA CGCAGCCAC CAGTCCCGGA ACCCGCCAAT GCTGGGAAGC GGAAAGTGAG GGAGTTCAAC  
 TTCGAGAAAT GGAATGCTCG CATCACTGAT CTACGTAAAC AAGTGAAGA ATTGTTTGAA AGGAAATATG CTCAAGCCAT  
 AAAAGCCAAA GGTCCGGTGA CGATCCCGTA CCCTCTTTTC TAGTCTCATG TTGAAGATCT TTATGTAGAA GGACTTCTTG  
 AAGGAATTCC TTTTAGAAGG CCATCTACTT ACGGAATTCC TCGNCTGGAG AGGATATTAC TTGCAAAGGG AAAGGATTGG  
 TTT

SEQ ID NO:1452: (Length of Sequence = 353 Nucleotides)

TGCCCTAGAGA GGGGCCGGGA TTTAGAGAGC TGTTCTTCTG CCTATCTGAT CGCCTCCTCA GACACTGATC TATTAGTCTA  
 GTGCTGCAAT TACTTGGATT GTAATGTTTC CTTGCAATTT TTGCTTTTCA AATTCTTTTC ACCCTAAACT GTAAATACGC  
 CAGGAGTAGG TAAAACTTA CAGGTAAACA TTGCCAAGAN ATAAGGATTT TNATGTCTTC TGCTCAGTGG CATAACTCAA  
 ATCACATGAG ATAGATTTCT TTGCATCTGT CCATTGTATT TCTCTGAGGC TAATTTACAG CACTTTGTCA CGTTAGGNAT  
 TTTTTTTCCC CAGTGTCTGT ACTCTCCAAC TGG

SEQ ID NO:1453: (Length of Sequence = 258 Nucleotides)

GTTGCCCCCTN CTGTCTTTCT GTNACCCAGA GAAAGCTTCA CAAGCATGCC TGNAATTNAG TTGCACCATT TTATTACAGC  
 TGAAAGANTT GANTGTAAAG AAGGAAGTTT AATAGANCAAT ATAATNCAGC AGATTTATTG ATGGGGAGGT ATCTATTGTA  
 GTTTGGCCAG TGAAGGCAGG TCATAGAGGA AAATTTAGGT AAGTCGGATT TNCCTTAAAA AGAGGCCCAA GAGTTAGTAC  
 CTCAGGATTT TGTTTTCT

SEQ ID NO:1454: (Length of Sequence = 328 Nucleotides)

GAGATGGAGT CTGCTCTGT CGCCAGGCT GGGTGCGAGT GGCGGATCT CTGCTCACTG CAAGCCCCGC CTCCAGGTT  
 CACGCCATTC TCCTGCCTCA GCCTCCCGAG TAGCTGGGAC TACAGGCGCC TGGCACCACG NCCAGCTAAT TTTTTGTATT

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TTTGGTGGAG ACGGGGTTTC ACCGTGTTAG CCAGGATGGT CTCGATCTCC CGACCTCATG ACCTGCCCGC CTCGGNCTCC  
CAAATTGCTG GGATTACAGS CGTNACAACC GCGCCCGGCC GGTAGCAATA GTTTTAATTA AGGTCTTAAA ATCATACAAA  
AAGGAATT

SEQ ID NO:1455: (Length of Sequence = 342 Nucleotides)

AATTTAGGTA GATTAGCATT CCCATGTAAC TTACCAGAAT CAGAATGAGA ATTCAGAAGT CACCTGANTT GGCCGGGCAT  
GGTGGCTCAC ACCTGTAATC CCAGCACCTT GGGAGGCCAA GGCAGGCAGA TCATCTGAGG TCAGGAGTTC GAGACCAGCC  
TGGCCAACAT AGTGAAATCC CGCCCTACT AAAAATACAA AAAATTAGCC AGGCACCCCTG TCCACAGCCC CCACACAGAC  
TCGAGGGGCC CCCATCTCCT GTTCTGAACC CAACAGGGTG GTCCCACTNT GGGACCACAA ACCAGGTATG ACTGTTTNAG  
AAGCAGGCTC ACTACCAAGN TA

SEQ ID NO:1456: (Length of Sequence = 296 Nucleotides)

ATCTTTGACC TATTAGGTGA ACAAATGAAC CTCACAGGAC ACACAGTATT TTTTAAAGGC AGACTCGCTC TCTTTTTTGC  
CAGTNAGCAG TTCTAGCTAA CCAAGTTACA CACTGTGGGT ATTCTGCCT GCCTCTTGAA TACAAAGGCC TAGTTCAAGT  
GTTGCTTTTT TNATTTCAAA TCAATTTTTT CTCTTTTCTT TTTTGAGATA AAACIATTAA AAGTACTACT ATATATATAA  
AANCTCAAAT CAACTTTTCG GCCTCCTCCT CGGTACCAG GGAGTATATT CTGACG

SEQ ID NO:1457: (Length of Sequence = 314 Nucleotides)

GAGGATTCAT AAGTAGAATT TATAAAGAAC TCCAAAGAAT CAATAACAAA AAGACTGGCT ATGGCCTTCG NAGAGCAGCT  
GCTGTCTTGG AAATCAGAGG ACAGTGAAGG GAAGTCCGAA GATGAGCCTG ACACCATTCG GACATCCGTC CTCCTGCAGG  
TGGTGGAGCT GCTAGGAAAC TTCTTNTGGA CCACGGACAT GGCAGCCTGC NTGAAGGAGC TTGTTTTCCA TCTCCTGGCA  
GAGCTCCTAC GCACGGTGCA CACCCTGGAG CAGAGGCGGC ACCCCGCTGG CCTGTNCTCC TCANTCGCCC TCCA

SEQ ID NO:1458: (Length of Sequence = 254 Nucleotides)

GTTCAGTCA CAGATGTTTC ATTATCACTA TTCAATATTA TTAAGCATCT AATAAGTATA AGGATGCATG AGTCAAGGGT  
CCCTACCTTC AGGTCCGAAG CAGGAAAGAG ACCAGATCCT AGAACAATAG GACATGGTAC CCGCTGCCTA GACGGAATTT  
AGAATCCGGC TGGGTTGAAG AGATTAATGA GCGAGTCATG CCATCAATGT GCTGTAACTG AGGTCTCTAA AACCACCCAG  
CCGCGACACA AACT

SEQ ID NO:1459: (Length of Sequence = 343 Nucleotides)

AGAAAGGCTC AGGGATTAAG TAAAAAGGCT AGTACATCTG GGCTCCATTC CATTATTTAG TCATCCAAA GAAGTGAAGT  
GGAGGATAGT GAGCATCTAG TATATGCCAG GCACTAGACT GGCTGCAGAG GATTCAGAGA TACAAAAAAC ACACTTGTTGA  
CCAATTTAAT TTGAATTTAC CAAGTTGAAT GGCAAAAATA TCTTAAAAAT TTAGATGCCT TGATAAATGT AGTGGTATAT  
TATGATAGCC ATTCTATGCC TTGAGATACC GTGTATTCTA TATTGTATAG TTGAGGGATT GAGGCCAGTT GGGAGGAATA  
AATTATAGCT TGTCCTTATC AGG

SEQ ID NO:1460: (Length of Sequence = 348 Nucleotides)

ATTGTCAACA GTGTTTTTAT TTATACCTAC AAAAAGAAAA CAAGATGATG GTATCAAAAG GACAATTTAC AACTAAGAA  
TAGTAACATA GCTTTCAGCA TCCTGTGCCT GANCAACACA CATCTACAAG TCTTTCAAGT CTTAATGCAA CAGGAATGTN  
TCTGGAGACC NGCAAGAACA TCAATAGAGA GCACTGATCC CAAGCAAAAG CCACTAACCT TTTAGATGAG AAGTCCNCAC  
AACGNATTGT TAGGGAGGAT TTGGGAGAAG CAGCCCCCTT GCTTAATACA TTTGGACCCC TTTCCCTTAA GTTGAGGTTT  
AACCCTTGAA TGCAATAACT TGGCATAA

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SEQ ID NO:1461: (Length of Sequence = 343 Nucleotides)

TGGGAAGATC AGGTCTTACT TGTTTTCTG TCCCTCCAG CGCTAGATCA ACACAGTGTT AAATTAGTTG AATTTTCAGTG  
 GAGGAGATAA GACAGAAATG AAATCTGTGA AGATTGAGAC TTTCCTCAAGT TAAAACCACT CTGAGTTAC AGATCAAGAT  
 GATGCCAGAA ATAACATCAC ACTGAAACAT CAGTCAAATG TAGTCATCAT GSCAAAGGCC AAATGTCCCT TTCTTTTTTT  
 GCCTCCGCCT GCCTGGGAAT TTAGCATCCC CTAAAGCCAC TCATCTGGGA CAGGATTTTA GGGTGTGTAC ATGTTTTTCA  
 ATCTCCACAG GACCCAGCTG TGT

SEQ ID NO:1462: (Length of Sequence = 335 Nucleotides)

GGCATGGAGC AGGCAATGAC TTGTCATAG TCGTGCAGT TATGAGCACC AGCTTGAAC TAGGAACCTCT TATAAATTTT  
 TGTTTTCAAC CAAGTATTGA GTGTCTGCTA TGTGTCAGAC ACTGCGCTAG GTGCTGAAAT CTCACITCTA CTGAGGAAGA  
 CAGGAACATA AATGGTGATG ATCATTGCAT TAGAAGTGAT GCCACGGGAA TAGTGTGGGG CCTCTCCAGG GGGATCTNAA  
 GGTAGGGAGA CCACACTTCT CCAGTGGTGG AGAGGGCAGA CAGCGTGTAT NGGTCTCTCA AGGTCTNATT GCAAAGGTCA  
 TGTTTTAGCT GTTCA

SEQ ID NO:1463: (Length of Sequence = 382 Nucleotides)

GGACCGCTTT CGGTCTCTCA GGATAAACAC GAGCATGCC ACCACGGTGA AGGCGGAGGT GACAAACACC AGCAGCAGTC  
 CCGGGACCAA CACCGAGATG GACACCTGCT TGGTGTCTAG GTAGGAGTTG GAGTGGCTCC CGGTCTCCGC CAACCCAGTG  
 CTGTTTTTAC TGTGCGAAGT TAACGTGGGC GAGATCCTAG CGTACAGCTG AGGGCAGATC TCGTCATTGG AGAGGAGCAT  
 GAAATCCITT CTAAAGAAGT TCACCGGGT CTCACACTTN AGGTGCTCA TCAGCACTTC GGAACCCAAG CNTTCTGNCC  
 ACTTGCTTGA AAGGCACAAT TGTCAGGAG CACTNCCAGG GGTTCCTG GAGGGTCTAT CT

SEQ ID NO:1464: (Length of Sequence = 187 Nucleotides)

AANGACCTCA TTTCAAAGAA GAGCGTCTC CTGACAAGGG ACGTTTCCCA GAGAGGAGAC GTGTTAGTGC AACAAAGACC  
 AGGCCCTGGN AGCCACGAAA GGCCTCCAGA TGCCTTGAGG ACGCCGTCTN TAGCCGNGTG GGCCACGNCC GGGTGGGGAC  
 AGACAATGAC AAGAGGCAAG ACAGCCG

SEQ ID NO:1465: (Length of Sequence = 276 Nucleotides)

TTTACACAAT CAGTATAATA CTGATAGGAA AACTTGACTG AGTTCAGAAA ANGAAAACGA AGTAGAGATC TCACTTGCAT  
 CAGAACAAA TGTCATCTA TTAGCAGATA ATATTATCA GTATTTTTTG AAAATACAAT ACCACANGAA AGAAACAGTG  
 GACATTTGGA GGGCTTTGAG GCCTGTGGTG GAAAAGGAAT TATCTNCCCG TAAANCTAG ATAGAAGCAT TCTCAGANAC  
 TTGTTTGTA TGTGTGCCCT CACTGACAG AGTTGA

SEQ ID NO:1466: (Length of Sequence = 375 Nucleotides)

GGGTTTINAC CATGTNCCC AGGCTGGGCT CAAGTGATCC ACCCTCCTTG GCTTCTCAA GTGCTGGGAC TACAGGTGTG  
 AGCCACTGTG CCGGCTGGT TTTNTTTTT TNAATGAACA TGTGCAAAT CACGAGAGC ACCTNINATT CTGCATTINC  
 TGGSTATAA CAAACATTGT CATCTCTGCC TACATTTAAA AGGCTCTGGT GTTATTTTAA TATGCTTTT CAATTAGTA  
 ATTAATTCTA ATTTTCTTT GAGCTGAGAT GTTATTCATT GTTCTCTAG AGTTGCTTTT ATTTGTTTAT ATATGTTTCC  
 CTAGCATGT TTTTGTATC TCTAGTTAT TAGATACCTG AACATTTGAC ATTGG

SEQ ID NO:1467: (Length of Sequence = 319 Nucleotides)

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TGATAAAAGG AAAACGTTTT GATTATAGT ACCAAGTGCT TAAACACAAG GATAGTGTTA GATTTTCGAG TGACTTTCCT  
 TTTTGCAATT TTTGGCAGTA AAAGCCAAAC GTTGATTTTG TCCTTTTCAG AGTTGTCCAG CCCTTTTTTC CTTTGTCCAA  
 AATGATTCTA AATAGAATCT AATAAACCAA TGTAGCATT TTTTCTTCTA AATGAAGCCC CAAAAAAGAA AAGTGCCTTG  
 CATCATTTAA AAAAAATAAT TAAATCCTCA TGGCCTCTAA ATTAGGTATG TAGGGCACTG AAAAGTTCTT AACATTTTT

SEQ ID NO:1468: (Length of Sequence = 352 Nucleotides)

TTTGGTTAAC ATTCCAACA TGTATAACCA ATTAACATGG CCTAGGGTTT TCTTTTTATT GGTATTCCT TCACTAACTT  
 GAATCCACAG ATATAAGCAG TATATAACCA GAAAGTTACA AGTAAACACA AATTATACAT GCAAATTTCT GTTCACAAAG  
 GTCACATGTG CAGGTACATG ANTTAGAAGC GTGCATCTAG GATTATGGCC AAAGTGTCTT AAAAATGCAG AAATGTAAAA  
 TTACATCTTG AAAATATGAA GAGATGGTCT ACACACTTCA AAAATCAAAT GTTGCTTATA CCAGAGATGT ATGTCAATCA  
 CGGGNTCAA GTGACAAGCA GTAAGGATCC TC

SEQ ID NO:1469: (Length of Sequence = 427 Nucleotides)

GAGATGGAGT CTGCTCTGT NACCCAGGCT AGAGTGCACT GCGAGATCT CGGCTTACTG CAACCTCCGC CTCCTGGGTT  
 CAAGTGATTC CCTGCTCA GCCTCCCAAG TAGCTGGGAT TACAGGCGCC TGNCACCGCA CCCAGCTAAT TTTTGTATTT  
 TNAGTAGAGA CGGGGCTTTA TCATCTTGGC CAGGCTGGCC TCCAACCTCT GACCATGTGA TTCACCTGCC TCCACCTCCC  
 AAAGTGTCTG AATTACAGGT GTGAGTCACC ACACCGGCC GGATCTGTG AGTTTTCTTT AATGCATATT GAGTTTCTTT  
 AGTTTTAAACA CACTTAT CTGGTTTGA CCCAACTAT TCACTATGTT TCTTGGGGGA NAGCTTGAA TCTTGGGGTG  
 GNAGCCAATT AGTAATAGC CAGGGTG

SEQ ID NO:1470: (Length of Sequence = 426 Nucleotides)

AGGAGTTTGA GGCATCTCTG GGCAACANAG GAAACCCCG TCCTACAAA AAGAAAATTT GGTTTTATA TTTATTTGTA  
 TTAAATTTTT TAGAAACATA GCTGGGCATG GTGGCACAG CCTGTAGTCC TAGCTACTCA GGGGGCTGAG GTGGGAGGAT  
 TGCTTGAGCC CAGGAAGTTG AGGCTGCATT AAGTGTGAT CACACCACTG TNCTGCAGCC TGGGTGACAG AGTGAGACCC  
 TGCGACTCCA GACAGGTGCA CACCACCACA CTCAGCTAAT TTTTGTAGA AATGAGTCT CACTATGTTG CCCAGGTGG  
 TCTTGAAGTC CCGGGCTCAA GTGATCCACC TGCTCAGCC TCICAAAGTG CTGGGATTAC AGGCATGAGT CACAGTCCCT  
 GGGCCCAAT TCATAGTCTT AAACAT

SEQ ID NO:1471: (Length of Sequence = 372 Nucleotides)

AGAAATATTA AAAAGACCAG ACCTTAAAG CAAGANTTGA AATACCTAGT TGTAAGATG TGGCACCTGT GGAGAAGACT  
 ATTAAGTTGC TTCCAGTAG CCATGTTGCA AGACTACAAA TATTCAGTGT AGAAGGACAA AAGGCAATTC AGATCAAACA  
 TCAGGATGAG GTTAATTGGA TAGCGGGTGA TATTATGCAT AANCTTATTT TTCAAATGTA TGATGAAGGA GAAAGAGAAA  
 TCAATATAAC ATCAGCTTTA GCAGAAAAA TTAAAGTTAA TTGGACTCCT NAGGTTAACA AAGAACACTT GCTACAGGGT  
 CTGCTTCTCTG ATGTGCAAGT ACCNACATCT GTAAAAGATA TNCCTATTT CC

SEQ ID NO:1472: (Length of Sequence = 332 Nucleotides)

GGTAGAGACA GGGTCTCACC CTGTTGCTCA GGCTGGTCTC AAAGTCTCTG GCTCAAGCNA TCCTTTCACC TTGGCCTTCC  
 AAAGTNTAG AACTGGCCAG GGGTGGTGGC TCATGCTGT AATCCAGCA CTTTNGGAGG CAGAGGCGGG CAGGGAGTTT  
 AAGACCAGCC TGGCCAACAC GGTGAACCCA CTCTCCACCA AAANTACAAA ATTTAGCTGG ATGTGGTGGT GGGCGCTCT  
 AATCCAGCC ACTCAGGAGG CTGAGGCAGG AGANTCACTT GANCCCGGA GCGGAGGTT GCAATGAGCA GAGACGGCT  
 GGACGACAGA GT

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SEQ ID NO:1473: (Length of Sequence = 434 Nucleotides)

GCCTTTAATT TGGTTTINCT ATGCCAGTAC AGAAACATCT GGACAACACT CTTGAGCCTG CAGAGGCTCA CGGCCACACC  
 CACTTCTGCC GCAGGACTGT CTGTTGAGGA GCCGAACCGA TGAGGCACAG TAGCCAGGCC CTCCCGAGGG CTCCAGAAGC  
 TCTAGGTTTA CGGGGTCACC TTCTGTAGG TGACGTGAAG ATGCTGAGTC ATTGGCTGIN TCGTGGTTGC CATGGAGACC  
 GTCIGCTCAA GTTTCCTTC AGAATTCAGC CTGAACCTCC GGGTGATCTG CTCTACGTGG GGCTCCTTGG CGAAGGAGAT  
 CCTGGCGATG GAGTGGGATG CGATGCACAG NTCCTGCCCG TTCAACTCGC CCTCCINCACT TTCCANCACT GGCTGTTTTT  
 TTGGCGTGAC AAAAGGCCAC CTTTTGGTG TCGG

SEQ ID NO:1474: (Length of Sequence = 402 Nucleotides)

GACGTTNAGG TGGGAGGTTT GTTTGAGCAA CATAGTGAGA CCCCCTCTCT ACACAAAAC AAAAAAATA AAAAATTATC  
 TGAGCATAGT GGAGCATGGC TATGGTCCAA GCTACGTGGG AGGCTGAGGT GGGAGGATTG CTTGCTNTCCA GGAGTTCAAG  
 GCTGCAGTAA GCAGTAATGG TGCTACTTCG CTTACGCCTG GGCACACAG CAAGACCCTG TCTCGAAAAA ATAAATAAAG  
 TAAATAAAGT TGAGAATTTT GTATTTTGGT ACAGAAGGTC TATGCCTTIN AAATGCTCCA TTGGACACG CTTAGGGCAG  
 GACGCTCTGA AACTGGGAAG CCTGSGGCC TGTACANTCT TGGCTGTCCC CTGTACANTC TCCTAACTCT AGAGGGCTGG  
 TT

SEQ ID NO:1475: (Length of Sequence = 324 Nucleotides)

TTGCATACCT GTGCTGTGTC AGACCAGGCA GAGTCATCTC ATTCCACTGG TCTAATGGAT GGCAATTGAA TTTAATTAAAC  
 AAAACTCCTT TGACTTAGTT TCATACTGTG CTGAATGTAA TGGAACTCTC TCTGCCCCCT TATCTCTCT CTCTTTCACT  
 CTCTCTCAAC TAAAAATTGT CCTTAACTAA CATCCACTTT AAGAATATTA AAGGCTATAC ATTATACTTA AAAGATACAA  
 TACAGTCATC CCCCTTTCCA TGACTTAAAT TGTATAACAT AAAATAATTA AAAAGTACT TTGGATAGTG ATACACAGTA  
 TAGG

SEQ ID NO:1476: (Length of Sequence = 244 Nucleotides)

GAAAAACCAG AAACCTCAAAA TCAGAGTGCC TCTCTCCTC CAAAGGAACA CAGCTCCTCA CCAGCAACGG NACAAAGCTG  
 GACAGAGAAT GACTTTGACA AATTGAGAGA GGAAGGCTTC AGAAGATCAA ACTACTCTGA GCTAAAGGAG GAAGTTGAA  
 CCNATGGCAA AGAAGTTAAA AACTTTGAAA AAAAATNGA CGGATNGATA ACTAGNATAA CCGATGCAGA GAAGTCCTTA  
 AAGG

SEQ ID NO:1477: (Length of Sequence = 338 Nucleotides)

ACAACACATA CTTGAAACTG ATTATGACTG TTTTGAATG CATTTTGATT CCTTAGCTAT GCCTCTCAGG TGAAAGGACC  
 AATGCAAGA GGAAGCAGAG GATTCATGCA CTAGAAAATA CTGAGAGAGA TCAGAGTATT CTGTCTACTT CACTGAAGAT  
 ATGGTCTATT GAGGGAAAAC TAATTAACAG TTGATCCAAG GAACAAAAGA ATGCTGTTAT GTGACATTTT GTTGGGAAAC  
 TGACTGTAAT AATAATAAAN CAAATGTCCA GAGGAATGTG TCACATAATT NCAGTGTTA TGGTTGATAA TTCAAAGGCA  
 TAGATGAATT GGGATTCT

SEQ ID NO:1478: (Length of Sequence = 397 Nucleotides)

ACCCTTTCCC ATTCTGATAA TCTGGCCATG ACTAGCAGAA GCACAGCTAG GCCCAATGGG CAACCCAGG CCAGCAAAT  
 TTGCCAGTTC AAATGGGTCC TGCTGGGAGA ATCTGCAGTG GGAAAGTCAA GCCTGGTATT ACGTTTGTG AAAGGGCAGT  
 TCCATGAGTA CCAGGAGAGC ACCATTGGAG CGGCCTTCCT CACCCAGTCC GTTTGINTAG ATGACACAAC AGTGAAGTTT  
 GAGATCTGGG ACACAGCTGG GCAGGAGCGA TATCAGAGCT TAGCCCCAT GGTACTACAG GGGTGCCCAA GCTNCAATCG

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TGGGTTTACG ACATTACTAA TCAGGGAAAC CTTTGTCCCG AGCAAAGACA TGGGGTGAAG GGACTACAGC GACAGGC

SEQ ID NO:1479: (Length of Sequence = 389 Nucleotides)

GCTAGAGNGC CGGCTTGCGG GGTGAGTGG CCGAGCTAA GGGTGCGGAG ACCCAAGGGC GGCGACTACG ACGGCGTTGA  
TATCGGTGGT AACGACGGCC TCAGCAGGCG GGAAGATGA AAGGCCGNT CGAGCTGGGA GATGTGACAC CACACAATAT  
TAANCAGTTG AAAAGATTGA NTCAGGTCAT CTTCCAGTC AGCTACAATG ACAAGTTCTA CAAGGATGTN CTGGAGGTTG  
GCGAGCTAGC AAAACTTGCC TATTTCAATG ATATTNCTGT AGGTGCAGTA TGCTGTAGGG TGGATCATTG ACAGAATCAG  
AAGAGACTTT ACATCATGGA CACTAGGGAT GTNTGGGCAC CTTACCGAAG CTAGGAATAG GGACTAAAT

SEQ ID NO:1480: (Length of Sequence = 384 Nucleotides)

CTGAGAGCCA GGAGCTCTTG CGGAGAAGCC ACTGTCTGCA CGCCACCTGC TTOGATGACC CTGCTCTGCC ATCCCTGTGC  
TCCAAGGGCC GGGCCCTGCC GTTGCTGTG CCAGACGGT CTCAGGGAGA TGCCGGCCAG CAGGTATGCA TGGCGAGGCC  
TGGGCATCAA GGCCCGSATT CTATGGCTGC CAGTTTCATT CTCTCGTGT TGTCCCCCT AGCAAGACTT ATGAGGTTC  
TTGAGGACAA GACTCCCTCC TGCCACCTGG TCTGTTTCT GAACATTCAC TGCACTAGCA CGNCCCGG ACGCAGNCT  
TGGGAATCAG GCGTCGSCC ATGGTAGAGC GCTNGCACT GCTCGGCACC GTGACGGACG TTG

SEQ ID NO:1481: (Length of Sequence = 257 Nucleotides)

ATGTCTAGAG CTATTCGTG TTCCCAAGCC ATTTGGCTAG TAGGCCCTAA TTGGTCAGTG GGTTCGACC CCCCAATCCC  
TACCTCAGCA GCAGGAAAGG GAAGTGCTG TCTCACTG TNCCTACTAA GGCCCGTGG TATCTGGCA GAAGCCTCTG  
CATGTATCTN CGCTCTGAGG ATGGGGGTTT NAAACAAAA TAAGACCCTA CGTCTACTA CCTTGAGCTT GGCTCTAAAA  
CCACGGGAAA GGAAGAG

SEQ ID NO:1482: (Length of Sequence = 345 Nucleotides)

AATTGAGCTC AGACTAAAGG AATTCITTTT TGACTAAATA GTGATTAAGT TATGATATTC CTGTTGGCCT AAGAACAATG  
CCTATGATTT AGTTGTGTTA TGTATATTTG TACTTATAAC CAAACAATCG ATTGGGTACA AGTAGCCTTA GGGCAATACT  
TCCTTAAAAA CATGTTTCTG ATAACTAAA GCTTTAGCAT TAACCAGAAG TCATAATTTA ATAGTATGT AAAAATACCT  
CATTTATTTT AAATCCTGTG TTGGGGTAGA GGATTACAGT TGTCAATTCA AATACATGAA TCTCTTGTA AAAGNGGTAC  
TTTGACAGTT TCATGGGAGG TCAGG

SEQ ID NO:1483: (Length of Sequence = 344 Nucleotides)

CTGATGTA CTGTTTAAATAT GCTGAGTACT GTTGATTCAA CAACAACTT TAATGGGTGA TGAGCTTTTG CATACCAATA  
TGAATTTTNC AGCACTTCTG AAAACTGGCC ATCATTTTNC AAATTCACAA TTGCTGGAT GTCAGGGAAC AATAGGAAGA  
AGAATGAGCG TCAATTTTCA TGTCTTCTT TGCTTCTTCA CTGGCCTTCC ATAGAAGTAG TCAGAAAAAA ACAAGCACC  
ATCAACCACA CTTCAAAAC AATTCATGTT GGCTAAGCT TTGCTCAACA TTCATATGAC AGAAGGTAGN ATAATGAAAA  
GGGACTGCTG GGCATCACTT TCCC

SEQ ID NO:1484: (Length of Sequence = 380 Nucleotides)

TTCTTAAAG CAGTCTTCC TACAATTGT ATGCAGTAAG TCACTTAAGC ACTTAAGTGT CATATGGGTA CTTACATGGA  
ATTAGAGCAC TTCTGAATG GAATTAGAAA AAGGCAATT GTGCATACTA CTGATGCATT CATTTCTTAC AGAGATATGA  
TACCAAGGGC CAATAAGTGA ATAGAAAAAG GGAGGAGGAT TTATTAAATG AATGAGTTCT AACCTGTCT CTTACCAGCC  
ATATGACTTT GGGNTAAATA ATCAAACGCC CAATGAGCTC AACTGTCTAT TATTAGGGGA ATTTAAATGA GAGAATGCAC  
ATTAATTATG CATTGCAGAG TACATGGGAA AATAGTAAAA GCTTAATATT TAATACGGTC



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SEQ ID NO:1485: (Length of Sequence = 334 Nucleotides)

GAAGGAGCGG GGAACCAATT TCTCACTCTC CTCCCACTTG CTATTGTGAG AAGAGCGAGA TTTCAGGGCA GCAGAGAGCA  
 TCAGGAGATC AAAAGAAGAC ACTGCTGGGT GGTCCCTTAG CAAGTTTAG CTTCCTTNC TGCTGGGAGA GTATTCCTTG  
 GGCACAGTGC CAAGTGTCTC TAAGAACTA GTCATGCCTG ANCTTAAGGG CTCGCGGATT CTGGGTGGTG GATTTCCTTA  
 GGCTTGTCTG AGCCTGCCAG TGCTCTCCTC TGTCGCTCTG ATTTCCATTC ACGCTGAGCA GTCTGCACIN CCTTGGACAG  
 ACCCACTGGC ATTT

SEQ ID NO:1486: (Length of Sequence = 164 Nucleotides)

CTGAAACGGA AAGATGGCGC TGCTGINCTT CTAAGCCTAG GCTTCTTGCA CTAAAGCACC AAGGGCATCG CACACAGGCT  
 TGGCAGAGGG GCCATGGCCA GANTCACCAC CTTAGACAA GTATGTTGGA GGTCTCGAAT CCCTTGGCAC CCCAAGCAT  
 GCAG

SEQ ID NO:1487: (Length of Sequence = 298 Nucleotides)

TTGAACCCAG GGGGCAGAGA TTGCAGTGAG CCGAGATCGT NCTGCTGTAC TCCAGCCTGG GCAACAGAGC GAGACTCCAT  
 TTCAAAAACG AGAACCCAGA GGGCTCACTT GCCCCTTCCA CCACACAGTG AGAAGGCACC ATCTATGAGC CAGGAAGCGG  
 GCCCTCACTT AACAGGATCT NCTGGGCCTT GACCCAGGNC TTTACAACCT CTAGANCCAT GAAAAATTTT TGTTGTTCTT  
 AGCAGNCCAA ACAGAATTAG AACCATTAAAT TTCTATTTCT CTTTAGCTT AACACTGG

SEQ ID NO:1488: (Length of Sequence = 343 Nucleotides)

TTGCTAGTTC AGGNTCAATG TCATGGCTGT AACTAATATA GTACATTCGG CAGTTGCAAC GCGAAATGAT CCGCTGGACT  
 TGCTGGGCTT GCTGTGCCTC ANCTGGCTGG TTCCAATCTG TGGTTGTGGT AACCATGCGG CCCACTGCCT GCCCACTCTC  
 CATCAGCTCC TGCACAGAGT CCAGACTACG CTGCCGGTGC TGCTCTTTT GCCCAGGTG AAGTGCAGTG GCGCAATCTC  
 AGCTCACTGC AACCTCCGCC TNCGGGTTC AAGCAATTNT CCCACCTCA GCCTTNCAG TAGCTGGGAT GACAGGCGGC  
 CGCCACAACG GCCAACTAAT TTT

SEQ ID NO:1489: (Length of Sequence = 412 Nucleotides)

ATTACCTTTT TATAACCCAA GANTGCCATT ATTACCCCG GAACCTCAC CAAATAAGTA GGAAACTAC ACTGAGAACA  
 ATTGGGCCCA GCTGTCTCTG GCCCATTTCC CTTCTACCG CCTCTGTGTC ATTCCAGCAA TCTAACTCGA TGAATGATCT  
 TCCAGTTGGA AAGATGGGGA CTTACAATG TGCAGACCCA AAGATCTGTC TTCCAAAGGC CAATCACCAC TGTATCCTTC  
 GTTCTTTTAA ATGTCGTGTG TTATTTGAAT ATATTAAGGA ATAATATCAA GGGTAATTAT CTATGTATAA AATGTATGNT  
 TAAATTTTAA GGGGACCATC ATACTGTTT TCCACAGTGG CTGTACATTT TACAATTCCC ACCAACAATG CACAGGGTTC  
 CATGGTTCCT AT

SEQ ID NO:1490: (Length of Sequence = 356 Nucleotides)

ATACCTTCTT TCATTTAAGC CACCCAGTCT ATGGTACTTC GTTATGGCAG CCTTAGCAAA CTAATACGGA TTCTCATCA  
 GGTTCAGATT TTNCTAAATA AAATGTGTTT GTGAGGGTGG TACAAGCAAC AGTGATATAT TTCTTTAAGT ATTTTCCCCC  
 AGCCAAATTC CAACAAGACA ATAATGTCTA ATGCACTGTC TGGTGAATCG GAAAATCTCC TGAATGAAAT AAGAGCCTCT  
 AATACCCAAA AGGGAATGAA GTGAGTCATC ACCACAGCCT GTGAATGAAA ATAAGTCTC TGAGGAAAAC ACATGTAAAA  
 AATGACACCA TGTGGATTAA ATGGGGGAC ACAAGT

SEQ ID NO:1491: (Length of Sequence = 335 Nucleotides)

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TTCCTACCA AAACAGTTA CAACAGTTCC AGCCAAATAA CACAGGCTAC CCCATATGCC ACGACACAGA TCTTGCAATC  
 CAACAGCATA CATGANTTGG CTGTGGGTCT GCCTGATCCN CAATGGAAAA GCTCAATTCA GCAAAAAACA GATCTGNTGG  
 GATTITGGTTA TTCTCTACCT GATCAGAACA AAGGTAACAN TGCCTTACTT TACATTCCCTG ACTACCGNTT GGCTGAGGGA  
 TTGNTAATA GAATGCCACA NAACAGTCT NAGGATTTTA GCANCCACCA GCTCTNACAA CAGCTCAGGA AGGAGTTGGC  
 AGINTCTCAG GTGGG

SEQ ID NO:1492: (Length of Sequence = 321 Nucleotides)

GACTTCATAA AACATCCTTT ACTATATTTT NAAAGAAAGC AGAAGTAACA GCAATATATG TAAAAGTAAT GNTTTAATGN  
 CTATAAGCAA GNCAGGCAA TAGAATTGTG CTCTTTTTGC AGACTGGGGN CAATGAAATG TTTAGCTACA ATTTNCCCAT  
 ACAACATGA AACAATATTC ATATAGNNTA ANCACCTCA CAAATAACTG ATGGGTGATG ANCACACACC AAGTTCGACC  
 AAAGCAAAAA NTAAACTGAA AATTGTGGG TGGGGTTATT CATATTTTAA ATTCAACATG CTGCTCTAT TAAAAATAC  
 C

SEQ ID NO:1493: (Length of Sequence = 315 Nucleotides)

GACGGAGCGA GGGGACAGAG CCCAGGGATG GAGGCGGGAT GCGGGGGACA GAGCCAGGG ATGGAGGCGG GATGCGGGGG  
 AGCAGCTGGT AATGTGCAGA GACTGGGAGA GGGCGGTGTC CAGGTGGAGA GTATTTCAAG GAAGAGAAGG ATTAACAGCG  
 TCCACTGCCG CAGATGGGCC AANCNGAGAT GGGACTGGAA ACCAACCCT GCATTTAGCA TCCTGGGGNC TGCTNATAAC  
 CTGTGTTTGA TGGCTCTCA AGAAGAGCCA NAACCTTNA AAGTTAGTTC AAGAGAGAAG GGGNGAAGAG AACT

SEQ ID NO:1494: (Length of Sequence = 405 Nucleotides)

AAAAGTTGAC AAAACATAA GTATCTCTAG ACAGCAAGGA AATAATTCA CGAGATTGCT AAATTGATGT CAACACCTGC  
 AGTCTAAAT TTATACAGTT CAATATGTTT CATTGATCA CTGGCATGTC AAATATAGAA CAGCTATGAC TTGCTGGCC  
 AGTAAATTAT CTAGCAGTGA AAATCACTTT TTAGGAGAGT CGCAATCAAA CATTGTTTAA CGTGGGAGCC TATAAAGATG  
 CAAATTCCTG AACACAGTG TCTAAGAAAA GTACATTGGG TCACTCTGAA CAGGTGGTAT GAACATTTGA TTTAACTGCA  
 AGATCTNCG CINTTTACGG GCTTTGTAC CATCGATGA ATCTTACATC CGCTGATGAC TNAGAGCAAG CAGGGGCGAG  
 CTGCC

SEQ ID NO:1495: (Length of Sequence = 364 Nucleotides)

CGTCTAATGA AGAGCTTCGA AACTTGCTTT TGCTGGGCA TGTTGGGATTT GACAGCTCC CTGACCAGCT GGTCAACAAG  
 TCTACTTCTC AAGGATTCTG TTTCAACATC CTTTGTTTG GTGAGACAGG CATTGGCAAA TCCACGTTAA TGGACACTTT  
 GTTCAACACC AAATTTGAAA GTGACCCAGC TACTCACAAT GAACCAGGTG TTCGGTTAAA AGCCAGAAGT TATGAGCTTC  
 AGGAAAGCAA TGTACGGCTG AAGTTAACCA TTGTTGACAC CGTGGGATTT GGAGACCAGN TAAATAAAGA TGACAGCTAT  
 AAGCCGNTAG TAGGNTATAT TGATGCCAG TTCGAGGNT ACCT

SEQ ID NO:1496: (Length of Sequence = 370 Nucleotides)

GTCTCTTGA GCAAGGACCC AGTTATTCAT CTTAATTCTC AGGGGAATCT CTGTAGAGAT GAAAAGCAGG AGAACCAAGG  
 CAGCCTGGTC TCCTGGGTG ATGAAAAACA GACTAAGAGC AGGGACTTGC CTCCAGCTGA GGAGCTTCCA GAAAAGGAGC  
 ATGGGAAGAT ATCGTCCAC CTGAGAGAAG ACATTGCCCA GATTCCTACA TGTGCAGAAG CTGGTGAACA GGAGGGCAGG  
 CTACAAAGAA AGCAGAAAAA TNCACAGGA GGGAGGCGGC ACATCTNCCA TGAATNTGGA AAGAGTTTTN CTCAGGCTC  
 AGGCCTTAGT AACACAGGA GNATNCACAC TGGTGAGAAA CCCTACGGAT

SEQ ID NO:1497: (Length of Sequence = 376 Nucleotides)

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CACACACATA CAAAATCTGT CCATTGCCC GAGNAATNTG TATGTATGTN ASTTGGAGGG TATTAAAAAT CAGTTTTATT  
 CCAAAGATTT AAAACTAGAC ATGACTTAAA AACAAATTTCT GGAGCACTGC TTGCTGACAA TCTCGTAGIT CTCTGCTGCA  
 TTTGAGTGCA TTTTGTGGCC AGTCCATCAG GCGGTACCAT GGGATTATAT TTGAATGTGT GGTGCATCCT TCCTGGATGA  
 AGGATGTGTG AGGGACCTTG AACCTCAGCT GTATTAACT GTAGCGCCTC CAGTCAGTGC ACTAGATGAA ACTTTTAGAC  
 ANCCTGAATT CTGTGGGTC CNTTCTTTT CTTTATGTA GGCAGNCTNC AGCATG

SEQ ID NO:1498: (Length of Sequence = 281 Nucleotides)

TTTATAGGAC TTCTAATCTA ATTINCTAT AGTGTGACTA AAAGGGAGGC AAATTATTGG AACGGATTAT TCAAATGGNT  
 CCTTAAATAT TGCTATGTAT AATAAGCCAG TTATTATATC AGGACCATGT TCTCTGTAGG CCACTGTTTT NCTCTCTCAT  
 TCTCCAGTGG CGGCGGCGGG GAAGGCGGAG GCAGAGGCAG CAGCAGCCGC GCTGGCTGCA AATGAATGAN CCCCAGCTT  
 GGGGGGAGGA CTCCAGGTGA GCCTCTGCCC TCGGGAGGCC C

SEQ ID NO:1499: (Length of Sequence = 395 Nucleotides)

TTTTATCACA CCTGTTTTC CAAGGGTCCT GTTACGTACC ATTCACCATT CTGCTTAGCA ATGGCTTGTG AGATGGCATT  
 TATTCCTTCA GCATGTATTT TNATGTTTAC CTTCCTCTCA CCTAAATTC TCCCCACCC CAATAACAAT TAGTTGTTCT  
 ATTTGCATGT AGCCAGAGCA AAAAATGATT TCTTTCCCTT AAGTTACTAT TATTATAAAA GGGACGATAA ACACATGAGT  
 CATATACCA CAAGTATAGT GTGGAAAGGA CTCTAAACAT AGGCTCACTG AAGAAGGTGG CATTTGGGCC AGGGCTCAAA  
 ATAAGGCAGA TTCAGATTG AACTGAATAG ATGGAGGAGT CATTTCAAAC AGAAGGAATG NCATAACATG TGGAG

SEQ ID NO:1500: (Length of Sequence = 272 Nucleotides)

CTGAGTAAGN GTTCCAGTC GGTCCCACTG GTCACAAATT TTNTGGCACC GATCATTGAC ATTCACAGCG TCGTGATAGT  
 CCAATTCAIT GAGCTCCTGC GCGATGGCTG CGATCTGCTC CACGCGGTCC TGGTGCGCTG CCAGGTGCGT CTCGAACGNC  
 TCGTGCTTCC GCAGCAGAGC CCGNACCTCT NINAGCGAGC CCGACTCGTA ATCCTTNTGC AGCAAGATCT GCTCTTTGCC  
 ATAAGCCCAA GTCTCGTGCG TTGAGGCCTT CT

SEQ ID NO:1501: (Length of Sequence = 394 Nucleotides)

TTTTTTTTCC TGGACCTGTC ACAAGCTTTA TTGTCCCGAG CACAGACTCG CCACACTTCA ACAATTCCAC TGTGGGGAGG  
 GGAGGGGTGA ATGAAGGACC TGGGGAGGGG ACATGGCTGA GCCACANCCG GCGGCCACA CCGGGCGGGC TGAGAGGCC  
 ACGGAGGCAG AAGCTCCCAA GGAAACCGCT TCTTGACAC CCGTCACCAG GAGCCACCT CCGGGGGCTC AGNTCTTCCC  
 GGCACCTCC TAGATGGACC TCTGGCTGTT AGTAGACTAA TCGTGCCCC TACCGATGGG GCAGAGCTGC CTGATTTTTG  
 CTAGAAAGAG CTGTATTGTA NCCTNGGTTA GGNCACTAAA GCATCGTTCT AGACGGCTGT TAATAGAACT NCAT

SEQ ID NO:1502: (Length of Sequence = 373 Nucleotides)

GAAACAAGGC ATAATGTTGT CACAGAATCA GAGATCCAGT CTCATTTTC CACAAATCTC CAAATCTCCA GTCTTATCTT  
 GTGTGCTCTA ATGGTTTGGT TCAATCCCTT TCCAATCTT GTTTTCAAAG CATGGGGCCT GAGTGTCTC CACTCCTCT  
 AAGAAAGGAG CTTGGGTGGA AGGGACCATG CTGACCTCT CCATCAGAGG GCTCTTCCAG TAGTATTCTC GGATGCAACC  
 TCCATTTCTC AGTTACCAIT ATTTCCGTGA TCAGCTTGT CTTCTCTGNN GGGATGCACA GTGATCCGGG CCACCACTGT  
 TGTGTCTG TGCTTCTGCT CTTTCTATG GTTTCAGNT ATTTTCTGGG GTT

SEQ ID NO:1503: (Length of Sequence = 266 Nucleotides)

GNCAACAGGC CAGINTTTAA AGAGGGTCAA GTGGAGGTGC ATATTCCAGA GAATGCTCCC GTAGGTACCT CTGTAATTCA  
 GCTCCATGCC ACTGATGCAG ATATAGGCAG TAATGCTGAA ATCCGGTACA TTTTGGTGC CCAGGTGCGC CCGCAACCA

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AAAGACTCTT TGCTTTAAAT AATACTACTG GGCTGATTAC ANTTTCAGAGG TCCTNNGATA GAGAGGAGAC AGCCATTTCAC  
AAAGTGNCAG TGCTGGCTAG TGACGG

SEQ ID NO:1504: (Length of Sequence = 311 Nucleotides)

ACTGGATGGA TGTTTGATCT GTGTTGGTCA TGAAGTTGTT TTTTTTTTTT TTAAAAAGAA AACCATGATC AACAGCTTT  
GCCACGAATT TAAGAGTTTT ATCAAGATAT ATCGAATACA GCATGGGATT GGGAAAGTTA ACTAAAGGTA TTTGAGCTTG  
CACTGGATCT TGAAAGGTAG AAAAAGGGAG CAGGAGGAAA CTCATCCAGG TAAGAAAAAT AGACTGTNCA AGATGGGCAT  
GAGAAACAGT GAGGTCCCN GCTGGAGGTG GTTGCTAGTC ATGTTGAGCA CTNCTGGCAG GAGAGGTTTT T

SEQ ID NO:1505: (Length of Sequence = 363 Nucleotides)

CCATCATGG CAGAAGGGAA GGGGAGCTAG TGTTGCAGA AATTGTATGG TGAGAGAGAA GAAACAAGAG AGAGGGAAGG  
GAGATAGCAG GCTCTTTTCA ACAACCAGCT CTCATGGGAA ATCATAGAGT GAGAACTCAT TCACTACCAT GAGAATGGCA  
CTAGGCCATT AATGAGGGAT TCGCCCTAT GACCCAAATA CCTCCCATTA AGCTCTACCT CCAACACTGG AGATCACACA  
TCANCATAAA ATTTGGAGGG GTCGAATATC CAAACCTTAG CAACTTGGA CCACCAGAAG CTGGAAGAGG CAAGGAAAGA  
TTTTTCTTA GAGGCTTCAG AATAAGGTAT TGCAATTCTG AAA

SEQ ID NO:1506: (Length of Sequence = 177 Nucleotides)

CGGACAGAGC AGGGCAGAAA AATGAGGGAA GGATGACAGA AGCTCATCAG AAAGCCAGTA ATACATAAGA TTAGTTTTNT  
CAGCAAAACC TNGTAACTT TGACGTAAA AGACAAATAT TTTGATCTCT CATTCCCACT CTCAAAAGG TTTCTAGTTC  
ATATTGTTTT GCTAAAA

SEQ ID NO:1507: (Length of Sequence = 345 Nucleotides)

CTTGCTTGAT TTCCCTCTG GTGTCAGAGA ATGTGCACAT TGAAAGAGAG GGAGCTCTCC ATCACCAGA GAGCCCAAAA  
ATAGCCCAAC TGATCATAGC GTTGTAAAA ATATTATGG ATGTAAGGAA AGATCCTTTC CCAGTCTGAT GCTCCTTGAC  
TTGTGATTG CTAAPTITGA GAAGCCATCA CTTACACAAC CTGTTTATA GACAAATCCT TCCAGTTTCA GAAGAAAAAA  
TGTCATCTAT CTCACCTCC ATCTCTTTTT CAAACTTGA TAGATGAGAA GAAAATGGTG AAATAAATTT TTTAGAATCA  
GTTTTCAGG ATTGGTTTC AAGGA

SEQ ID NO:1508: (Length of Sequence = 326 Nucleotides)

AGTTGGATTT CAGCTACTCA GAGTAATGG AAAAGGCCAC AGCCTGGTGG GCTTCACAGC TTTCAGAGAC CTGGTAGGGG  
ATGGCTAACA GGTTCINCTG CCAGGAGACA AGTGGCAGAC CCAGTGTGA AACTTTTACA GGTCCCAACA AGCCTTTCTT  
ATGGAGCACA GAGCATAAGG ACAACTTCTG CAGAAATGGA ATGGGGTACT TGGAAACCAA AATACATACA CCTCCTTCC  
CACCTGCCTC CAGCTTAGTA GCCCATAGTC CTCTTTGTCC CTCACACTGA GCCAGGGCCT GNCCTAGATG ATGAAATGCA  
TGCCCT

SEQ ID NO:1509: (Length of Sequence = 329 Nucleotides)

AGTATGGGTC CCTTGGTACT ACTCAAGGTT TACAATATTG CATTAAACAC ATTGAAAAAT ACACGAGAAC CTTGAGGGAT  
CACATTTTAC TGCAATATGT GATTTCTGG TGAGACTCCT TGTCAGAGA TGATTAGCTC ACAGAGCGTT GTAAGCACGT  
ACTCGCAACA CTTGAGCATG CCGCAATGGC AACAGGAGGT ATCTTCACAA TTATGATGGT AGTACAGTAT GTACTGCAGT  
TGTTTACACA GTTATGATTT AGTACTACAT CTTTACANIT GGNATTATTC TTNCTATTTT GAATGGTATG TACTGTCTGT  
GTGTACATA

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SEQ ID NO:1510: (Length of Sequence = 247 Nucleotides)

TAGGAAAGAG TAAGANCTTC TTINCAGGCT GGAGGTGCTC GTATGGTGGG ACAGGAAAGG GGAAAAGAGA AAGGGGCAAC  
 ATGGCAGACA TACCACGGTT CCTACAGAGA TTAGGGGCAG CCCTGGCCCG GGAAGTACAC AGGGCAGAGA GCTGACTCTC  
 AGGCCAGGAA GGAGTTTAGC TCTNACCCAT CCTCANGGAC CACGGCTCTC CCCAGCCTC AGCTGACACA CACACAAAGG  
 AGCGTTT

SEQ ID NO:1511: (Length of Sequence = 369 Nucleotides)

CCACTTGCTC CTTTATTAAAC TGINCTTCCT GTAGTGTGTA TTTGGGATCC ACTGGGAATC ATAGAAAGGA ATCAGTGCTA  
 GGNCTGTGTG GGATTGCACC CTGAGGGATG TGGCTTTGGC TTCTCTATCA ACCTTTCTGT TCCCTTGTGC TATAGGAGTT  
 AAGTCCCTTT NATGCCCCCT ACAGTGGATT ATAGCTATGG CCTGTGGCAG GTGTATTGTT TACAATAGCT GAAGAATTTT  
 AGGCCCATGC TTTATGGGGG AGGGTTTTNC TAGCTAGTAG TCCCTTTCT TTCTAGATTG CAGCATAAGC GTGAACCNCC  
 AAGGAATGCC ATATTTTAGA ATCCTGIVAT AGGATGGTTA AGGCTTTTT

SEQ ID NO:1512: (Length of Sequence = 236 Nucleotides)

ATGCATTAAAG AAAAGACAGC CAAATGACAG ACTGATAAAA TATTTTCATT ACAAATTGG TTGAGAACTA CCGTGTGACG  
 TAAATGAAGT TTCTATTACA CATGTACTAA CAGAGACTTT TCATTACATA TTCTAGGATA TATTTAAAAT ATATGTATAT  
 TTTGATATTA AGGGAATATA TTTTGTGTG CATTTTACAAT GTGTAACATC ATATATATTA NGGCCTTTCC AATAAA

SEQ ID NO:1513: (Length of Sequence = 408 Nucleotides)

CATTAATATT CTCAGTGTG GAAATATTTT NATATTGCCA AGACCATAAT GTGAGGNGTG CAGCTGCATA ANTCCCTGAG  
 AGAAGATTAG TGGGGCTAGC ACCTTACAAG GAAAGACAAG CTTGTGTGGT GGGCCCAAGG ACAGTCAAAT GTCTGCCTGA  
 CAATCTCCAC ACAGAAGGGT TGCTCAGATC ACTTAGGACA CCCAGAAAGA GCTCACAAG GGCAACAAC CTAAGGCTGN  
 TATTCTCCAT CTAGCGGTAC TTACCTGGGA ACTGAGTGGC AGTGGACAGG AAGCAGGGCC TGGGCTAGGG AGACCTCAG  
 GAGGAANGGG GACCCAAGAA GTTAGAAGTC CATTCAITCA TATACTCATT CATTGAGCAA ACATGCGCTT GACACCTTCT  
 GTATGCT

SEQ ID NO:1514: (Length of Sequence = 359 Nucleotides)

TTNCCAGGC TGGTCTCAA CTCTGGGCT CAAGTATCC GTCCACCTTG GCTTCCCAA GTNCTAGGAT TACAGGCATG  
 AGCCACTGIN CTTGGCTAGA AAATNINITT TTAAAAGTNA GGATGTAGAA TTNCTAGCT ATGTAGGCAA GGCAGGAGGA  
 GAGGGGCCCA GTTGGGAAGC ATAGCCACACA AGAGTATGAG GGCCTGANCC AGGATGGTGG CAACAGGGAT GGAGAGGAAG  
 GCGTGCCAGG GCATGGTGGC TCACACCTTA TAATCCTAGC ACTTTGAGAG GCTGAGGGAG GAGGATCATT TTNAGCCCAA  
 AAGTTAGAGA CCAGCCTGGG GNAACATAGT TAAGGACAC

SEQ ID NO:1515: (Length of Sequence = 343 Nucleotides)

GAGCCCCCTG ATGGCAAGAN CTGACCCCTC CATCCTGGAG AAGAGGAGAC CAATTINATA TTATGGAGGC AGAATATACA  
 GGACTGTGTG ACTAATTCGA CATGTGTGTC CATGGAGCTT GAAGGGGACA GAACCACAGG TGCAAACTG GTGTAGGTAG  
 TGCTGGCCAT TGCTCAGAAC TTTGTGTGAG TTGAGCCAG GCCTCTGGTT GCAGGACTCG TGAATGGAGC AGTCTGAGA  
 ACCACCCCTT TGCTAAGGGA GCTTNGGAGC CACATGGCTG CTCCCTTCAC ACTGGGTAAC AGTGTAGTAT CCGTGTGAGG  
 AATAAACGTA TTCATTTTAA AAG

SEQ ID NO:1516: (Length of Sequence = 380 Nucleotides)

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TTTTGCCTTA TTCTATCCGA TTTTTCCTT AAGCTTCTAC CTGGNATTIN CCTTTGGAAA AGTCTCTGAG GTTCCACCAA  
 AATATGGAAC TTATTTTGG ACACTTTGAC GAAAGAGATA AGACATCCAG GAACATGCGA GGCTCCCGGA TGAATGNTT  
 GCCTAGCCCC ACTCACAGCG CCCACTGTAG CTTCTACCGA ACCAGAACCT TGCAGGCACT GAGGTAATGA GAAGAAAGCC  
 AAGAAGGTAC GTTCTACCG CAATGGGGAC CGCTACTTCA AGGGGATTGT GTACGCTGTG TCCTCTGACC GTTTTCGCAG  
 CTTTACGCC TTGCTGGCTG ANCTGACGNG ATCTCTINTCT GACAACATCA ACCTGCCTCA

SEQ ID NO:1517: (Length of Sequence = 411 Nucleotides)

TGAGCAAAAC ACAGAGGACT GCACCTCTAG TGGCTCGTAA TGAGAAAGAA GATGGTCTCA AACCTGAGAA AGATAATGTG  
 GAGTGGACCT CTGTGTCTC AGTATTACA GTCCCTTCTA GGAAGTAGGT AGCATTCTG AAAATAGAGT GAAGCAATTG  
 ACTGATGGAT TTAATCTTTA AACTGCTTAG GTAACCATCA ATCTGTAATG AGCTTAATAC TCTTAAGTAG GTGCTATTTT  
 NCATGTGTGC TACTTTGCCA GTGATAAAGG ATTACGAAAA ATTCTTTACC AGAGGAAAAA AAAAAATTGA ATGACCTTTC  
 TTGGGAAGGT GGTCCTTGT TTGTGATCAA ACTTTGACAA GAACTGGTAA TTAATTTCTT CTAAGGAATT NACCGTTCTC  
 ATAGTGTGTT T

SEQ ID NO:1518: (Length of Sequence = 388 Nucleotides)

GGTGGGCAGC TTCTCTCTGC AGCTGCTCTC CCATCATCTG GCTGAATATG GGGCTTTNAT GGGCCTCAGG GGAGGAAGTG  
 TGTGCAAAAT GGTCCGTGGG CAAACATGGG CGGGCCTGGA AAAGGCACCA CAAGTTCCCA CCCCAGTCAG TAGGATCAGC  
 AGTCTGACAC CCAGGCTTCA GGGCCTCCCC GACTTGAAGG TGGTGCTTCA CCAAGGACTC ACCCACTCCT GCCCAGGAGC  
 TTGINTGCCT CCGTCTGCCA TTATGTTGTC CCAGGCTGTT TGINCCAAGG AGTGTCTGTG GGCCAGCCTT GAGCTGCCCT  
 CAGCACCCCC TTGGCCTCTT TTCTGINTCT ATTGGTGGCC AAAGTCCGCA GCAGGCTGAA GTGGCAGG

SEQ ID NO:1519: (Length of Sequence = 358 Nucleotides)

TTGGTTAAGA CCAAAGTCAG ATCACTCCCT CTTAGCTCCA AACCTGCAGT GGCTCCCAAT TCTNTCAGCA TACAAACCCA  
 GATCCTCAGG CTGCCATTIN TGGGCTGAAT CCGTCCCTG CTGTCTGATC CCACCAGACA TAATGGAGGC CTGAGGTTCC  
 CTGAACACTC CTAGTTTAGC CTTAAGTTAA GTATTTGCAC ATGCTGGTTC CTATGCCCTGA GATAATGTTT CACATTINAT  
 CCCATTGCTT GCCAGAAATA GAAACCTTC CACATAATIN CAAAACAGAG TTTACANCAC AGAGCTTTGG GTGACTGCAG  
 GCCTCAAGA ANGGNAGGCA GAAGGGGCAC TGAAGAGT

SEQ ID NO:1520: (Length of Sequence = 379 Nucleotides)

CCAGAGTTAA ATATGCCAG GCTGAAAGAA GGTGTATAAT GTATGNGCT NCTTATACCA AATGATTCTT TTGGAATTTA  
 AACAAATATG TTAGTATIT TATTCCTAAT TTAGGAAGAA AAAGCAACTA AAGTTGINTT GACATTGTAC ACAGATGAGT  
 AGCAGTAAC TTTTATTTAG TAAGCCCAT AGGATAGTAN GGNATAAAAG TTGTTAGTGA GCAAAACAGG AGTATCCTGC  
 CATTGCTTT AATTCTNCTT GTGATAGTTT TGAGGGTACA ATAATTCTG TGTGCGTGT ACTCAAGCAA ACCAGAAAGT  
 GTCCTTTGTA AATACGCATT TTGGGCTCA TCCTCATGGA GGTTCCGTT GTTTGTTGG

SEQ ID NO:1521: (Length of Sequence = 339 Nucleotides)

GGGACAGGAA GCCTCTTGGG TTGACTCAG ACTCAGGAGG TGAATCAAGC CTCAAGCTCA GAAGCCCTCT GTNACCATCT  
 GTTACTCAG AAGCATGCCC ACCATCCAT CGAGTGCCT TCAGGCACT GTCTGTAGC AGACGGAGTT CAGGCTTTGG  
 AAGTAGACAC ACCTGGGTTT AAATCACAGC TCCGCTTCTT CCGCTGAAG CTCCATAACC TAGGATAAAG TCGCTAAGCC  
 TNCCTAAGTC TCAGATTCTT TACCTCTAAG GTGAANGGAT TGGATTCCAC TTTACTTCCC CCTTTTCCC TTTANGGACT  
 CTGCATCCTC NITGCTTG

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SEQ ID NO:1522: (Length of Sequence = 405 Nucleotides)

GTGAATTTCA AGCAATTGTT AATGGGGACC AACAGGGCTG CATTAAGAAA ACCACTTTNN ACTGATCTCT CCCCCACATA  
 TTTTAAATTT GTCITGCTTT GTTTATTTTG GTTATGCAAG TCCTTTCTCT TCATGAAACA AGTGTAAAGG TCTAAGGCTA  
 AAATAATAGT TATTTTGTG GGGCCCAAAT AGCTACTTTT GAATTTCTTT CTTTAGTATA TCTCAAATCT GGGGAACATG  
 GAACTTGAAG ACTCCTAACC ATGAAGCATT TGGAAAAATA CATATCATTC ACTTTTCACA GAACCATTTT CTTAAAAATA  
 AGGGGGCAAT ATCCAGATTC ACATGCATGT TCATAAATAA AGCTTTGGTT TTAAAACAAA TCCACACCAG CAATTATTTT  
 CAGCT

SEQ ID NO:1523: (Length of Sequence = 284 Nucleotides)

AGNTCACAGA ACTCCAATTC TTTATTAAATC ACAGCTTGCT CACAATGACA TACAGGAAAA TAGCACTAAT GAAGNGTAAA  
 TATGCAGGCA GCAACCTTCA GGAGTTGGGA GTTGGGGAGA AACNCITCA AAACTCGGAT AGGTACTTAT GGTGGGIATC  
 TGGTGATTCT NAGTTGGCAC AAATGCCCTG CCTAGCCCC TTAAC TGCGT CACTTTCACA GATGGNGTGT TTTGTTGTTG  
 GTGTTGTTAG TAGGCAGGAT TGCCTTACAC TGGGGAAGAA AGAC

SEQ ID NO:1524: (Length of Sequence = 299 Nucleotides)

GTGCTTGATC GTGACAGTTT TGTCGATCA CATTTAGGA AGATGATGCT GTCTTNCIT CTTAAGTATT TATTTINATC  
 AGTCAAGTGA TAGGAAGTTC AATTTCAAGT ACAAGACATT TGGATCAAGA AGTGACTATT ATTTATTTAT TTNAGATGGA  
 GTCTTGCTCT GTTGCCCAAG CTGGAGTGCA GTGGTGTGAT CTCAGCTCAC TGCAACTTCC TCCTCCTGGG TTCAAGCAAT  
 TCCNCTGCCT CAGACTCCCG AGTAGCTGGA ATTTACAGGC ACCCACC GGG ACCAGTGAA

SEQ ID NO:1525: (Length of Sequence = 398 Nucleotides)

GGCCATGAAG CAGCTCTCGT GGATGGAGT CTCATGCCCTG CAGCTCTCCC ATACTGGAGT TGCATGCTGG TGGTCTTACA  
 GTGCTGGTGT CTGGGCACTG GCCTCACTCC CATGGCTCCA GGAGGCATTG CCTGGTGAG GGATCTCTGT GGTGGCTCTG  
 TCCCTGTAAC AAGTTTCTGC CTGGGCTTCC AGGCTGTCCA TGATATCCTT TGAAATCTAA TTGGAGGCTG GCATGACCCC  
 ATGGCTTCCA CACTCTGTGC ACCTGCAGAA TCAGCACCAT GTGGACACTG CCAAGACCTA CCTACCACTT GTGCTCTCTG  
 GAGCAGCAGC ACAAGCTACA TCTGGGGCTG CTTGAGCCAT GGCTGGGGCT NCCAAGGAGC AGAGTCTTGA GGGTGGCC

SEQ ID NO:1526: (Length of Sequence = 318 Nucleotides)

GTCTCTCTCT ACTGCACCAT GATGCCITTA AAAAGAATCT AGGGGCTGGG CACAGTGGCT CACGCCTNTA ACCCAGCACT  
 TTGGGAGGAG TTCACTGAG CTCAGGAGCT CGAGACCAGC CTAGGCAACA TAGTGAGACC CCGGINTCCA CTAAAAATGA  
 AAGCAAATTA GCTGGGTATG GTGGTCCATG TCTGTACTGT GGTCTAAGCT ACTCGGGAAG TTGAAGCAGG AGGNTCACTT  
 GAGCCAGAA GGTCAGGCT GTAGTGAGCC ATGATINTGC CACTGCATTC CAGCCTGGGC AACACAGTNA GACCCTGT

SEQ ID NO:1527: (Length of Sequence = 313 Nucleotides)

TTGGCTAGAA GGGAGGCTGG AGCCTTTCAT GTTGGCTTTT GAATGCCATG GTGAATAGTT TGTCTTTTAT TTGTNATGA  
 ATAGCAATTT GTACACTTCT GAGCTATTAG AGTGAAATGA TTAAGCCTGT GGTTTAGGAA GAAAGAGCCT ATTAGGGAGA  
 TAAATCTTTC CTTAGTTGTA GGAAGGGTTG GAACAGTATG ATATGGAGAG GGTAGTAATG AATGANGGAA TNGAAAACGA  
 GAATAATTTT AATGATACTG GAGGTGCACT ATACAAGTTG NGCAGTAGGT TTATGTCTAG GAAGATAAGA AGT

SEQ ID NO:1528: (Length of Sequence = 405 Nucleotides)

GGCGTCGCTA CCGCCACCGC CACCGCCACC GCGCGCGAGT GCTGTCTCTA TGGCGAGGAG GAGGAGGAGG AGCGCGAGTC  
 AGCGACACAA GTACATAAAT AAAGGATAAA ATATTTTATG AAACAAATCT TCAATCAAGT ATAACATTTT GATGCTTGGC

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ATCTAGACTC CCTTGTGCCC TCACTATGCC AGCGGAAGTG TAGATCATAG CCAAAGAATT TGTGAAGTTT GGGCTTGCAA  
 CTTGGATGAA GAGATGAAGA AAATTOGTCA AGTTATCCGA AAATATAATT ACGTTGCTAT GGACACCGAG TTTCCAGGTG  
 TGGTTGCAAG ACCCATTTGA GAATTCAGGA GCAATNCTGA CTATCAATAC CAACTATTTC GGTGTAATGT AGACTTGTTA  
 AAGAT

SEQ ID NO:1529: (Length of Sequence = 241 Nucleotides)

GAAGGAGAAA CACTTCTTGC CTCCATAATT CAGACAGTAA ACTGATCGCT GAGATTGAAG TTTGCTTGTT TCCTGGGGAA  
 GCTTNAAGAT CCTCGTGGGA CCACCATCCC CTGCTCAGTC CTCCCTGGAA GGGGGCACTG GCTGGGTATG AGCCGCGTCA  
 CCGTTGGGTT TGTAACTTTN TGGATGGTGC CTGNTTTTCA CCTGGGGCTG GCTGAGGAAA GGGGAGGCGG TAGNGTCTG  
 C

SEQ ID NO:1530: (Length of Sequence = 356 Nucleotides)

GGTCTCATGC AAGGGTTTCC CATGCCGTGA AGTGTGTTTG TAATCCCACTA TGTATCAGGT GCCTGGCTGC TCTGGGACTT  
 GCASTAATTG TCTCTTGTTT GTTTCAGGTG TGATCCCCTG GGCCCGTTTG TTGTCGGGGG AGAAGACTTA GACCCCTTTG  
 GGTGAGTACT GCTGGGGAGG TGGCAGCAAC ACAACTTGCT TTNITGGCTT TINAGCCCCA GCTCATCTTC TAATTINAGA  
 GTTTTCGGTC AGTCTCTTCC TTTGGNGTN GAGGAGGCAG TTGTTTGCTG AGCAGCTGAG AAAGCACTGC CACATACGCT  
 GGCCCTCCA CACCTAGAGC GGTGCAGGAG AGCACT

SEQ ID NO:1531: (Length of Sequence = 379 Nucleotides)

CCAACAGATG CTGCTACGTT TCCTTCAAAA TTGTTAAACA TCCTTGCGG AAGAAGCTGC TTAGTTATAT CCAGCGATTG  
 GTTCAAATCC ACGTTGATAC AATGAAGGGT GGGGTATCTA GCAGGATGTC TAGTTCACGC ACTGGGTGAA AAACAACCAG  
 AGCTGCAGAT AAGTGAACGA GATGTTCTCT GTGTTTCAGAT TGCTGGACTT TGTCATGATC TGGGTGATGG GCCATTTTCT  
 CACATGTTTG ATGGACGATT TTATTCCACT TGCTCGCCCG GAGGTGAAAT GGACGCATGA ACAAGGCTCA GTTATGATGT  
 TTGAGCACCT TATTTAATTC TAATGGGATT AAGCCTGTCA TGAACAATA TGGGTCTCA

SEQ ID NO:1532: (Length of Sequence = 307 Nucleotides)

GATAAACTTG AGCCACCAAG AAGTGGACTC TGCTAGGAA GACAGTTTGC TGAAGTTAGA AAGTACTGGT CTAGGAACCA  
 GAAAACCTGA TTCINCCAA GAGTTAGAAT TGINAGTNAG TTCTNCTGG TTTINAGTTT CTTATCTGT AAAATAATTA  
 CCCAGTTCAA TTGGATAATC TCTATGATCC CTCCACATT CTGCATACTT GGATATCTAC TGTCTCTAAA TATTTTGGCA  
 TTTCTTATAA AGCCCTTTCA CATTNCTTT ATTATTTTTC CCTCACAGA ATTCTGAAA TAGGATA

SEQ ID NO:1533: (Length of Sequence = 337 Nucleotides)

ATGGCTTTAT TTGCTGATTG AGAAGTGGTC CAGCCGTGGG CTAGCAGTCA TTACATATC AGTGACCAAA TGCAAACATA  
 CCCGTACTAA CAGTGCTTTG GTCCATGACA TACCCTTTTC ACAGCCCAA GCTGAAACGT CAACTCTATC TGGGGTTACT  
 TGCTTATACA AAGATGTTAC TCTAGCAATT GTTCTTGAG GGCAAGACCN GATGATTGTC ACTAGTAGGA AGAAAGCAGA  
 AGTGATGCAG CTTACACTGC ATAGTCCCTA CCCTTNTGGA TTAAATGGAA AAGTTGCTCA AACATAAACT TGTTCTTAAC  
 AAAGGTGGGT AAGANTC

SEQ ID NO:1534: (Length of Sequence = 317 Nucleotides)

ATGGGCATGT GGGTACTACG TTAAATATT TAATTATTTT AAAAATAAAA TAGGAAAGAT AAAATAGCTT AAAGTGATT  
 GATGCTCTGA ATAACTTTAT GAGTGAATAG ATACTGAAAT TTGAAGTCAG TGTTTTGCAC AACAAATCAA GATTTGGGAC  
 TGGACTTACT GGGTTGGGGA CTCTTAGGG ATAACGGTGG TGCTATGAGC ATGCTGAAA GATGAGAAGC AAAAGCCTGG



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AATTGGGAGT CCTGTACTGT CTTTAGGGTA TGCAAAGAGG CTCCTTCITT TCTAGGTGTT CATCAGTACA ATATGAC

SEQ ID NO:1535: (Length of Sequence = 323 Nucleotides)

ATATTACATT GATGTCAGTC TTAAAGATG GAGTAGGACT TINCAGGCAG CAACGAAAGG GAAGGACATT TCAGAAGCAG  
AAATACCAATT TGTAAAGGGA TGACAGCCAA GAAATATTAA AGCATATTTG GAAAGTATTG AAAATCTCTG TGTGGCTAGA  
ACTTTAGATG AAGAATCAGA TACATCTGGA GAAGGAGATT NAACCNGATG ATCATAAAGA ACATTTTATT TAGGCCATGG  
TAAGGCTTGG GCACTNTGGA GCCCATGAAG GTTTTGGAC AAGGGAGTTT CCTTAGGGAG GAGTATNAAG CCATAAACCA  
AAT

SEQ ID NO:1536: (Length of Sequence = 305 Nucleotides)

AACCACATTT TTAGTCATC TNCACAGC TGGATTCCAA CATGCTGGCC CGGAGCGTGG CTGGCTGGAA GCAACTCCAA  
CAGTTTTTC CCTTCCCGT CATGTACATT ATTTATTTT GATCCTACTC ACTGTCCAA GTCCAGAGGC AGTTACAAA  
AACACTCTTG ATGCAAACCG TGAGTGGCTA CAACACACCG ATGGGGGTGG GCGCGATTCC CACAACAGGG AGTGGGAATCC  
GGGAAGATG ATATATAGGG GCAAGACGGC CCTTACTTT GCTAAGAGTA TATGGGAGCT CAAA

SEQ ID NO:1537: (Length of Sequence = 279 Nucleotides)

GGTGGCAGCG GCGCGCGGC GACTGAAGCG CGCGAAAAGC TGAGGCGCA ACGTCGGGGA CGGCTGCNOG GGACGGCTCT  
GTAGGAAGGA ACTTGGTTCC CCTTCCCTCA GCTTCCGCCC CAAAAGATTG AGAATGGACA GTTTAGAAGA ACCTCAGAAA  
AAAGTCTTTA AGGCTCGAAA AACGATGAGA GTNAGTNATC GTCAGCAACT TGAAGCAGTG TACAAGGTCA AAGAAGAACT  
NTTGAAAAC TGAATGCAAG CTGTTAAATN GCAACCATG

SEQ ID NO:1538: (Length of Sequence = 310 Nucleotides)

ATATTTCTT CTGCTCTGAC TCGGAAGAA CTGCACTGT TGCTAGGCT GATAATCCCC GAAAAAAGT AACAAATGCA  
ATTINTACCCC CCACCCCAT ATACAGCCCT CATATATATA TATGAGAGAG AGAGAGGAAA AGATCATGAG ACATGTCTTC  
TAGGGAAGAAA AAATCTAAC TTCCCTAGCC ACTGTAGTCA TTTGAAACCT GAGTTAGACT ATGAGTTAGG AAGTATTTTC  
ATAGAGTCA ATTAATATAT TTCTGCTCTA TGCAATGATG CTAACAGGTT TAAGGAAACA CAAAAGCCAA

SEQ ID NO:1539: (Length of Sequence = 267 Nucleotides)

GAGATTTTAC TTTGTAATCG AGTAATTTAG CCACACTCTT GTGAGGGAAC AAGCCAGAGC CAGGACCGCA TATTACCGG  
TAAAGCTGCA GAGAAGACTT GAGACTTGTA AGATTGGNCC NGGCTGCACT CCGTGGTCA GTAACATCTG CAACATATA  
CAGCCAGCAG ATCAGCTCTT CCAGCTGACA GCAAATGTC TTCACACATT GCACCACTGA TTTTTCCTCC TGINTCTCTC  
CTTCTCTGGG GAAGCTGCCC TTNAACA

SEQ ID NO:1540: (Length of Sequence = 354 Nucleotides)

ATTTATTCAG ATGAAAAAA ATCAAGGCTT AATTTAAGTA ACTTGTCCTT GGTCAAGGAG TTGACAAGTG GCTGAGCTGG  
AGTTCAGCAT CTCAGACATC TTCTTTGAA TCCTTGCTT CCTTGTAAT TTCAGATGAC GGAGCATGAC GGTGTCATGA  
TTATGGGGTC ACCGGGCCTG TCCTGGGCCT GAGGGACCAA GGATCAGAAA GGGCAAGAAC CACTCGNTC AGCTAGTGAA  
AGTGCAATTG GACANTGATC CTGTTCCGG GNTTAACCTT CCGCTTGGCC TTTAAGAGGG NTTCTTGAAA TGCACCAAGG  
GGCCTAGAG GAAGCAAGCA AACINCTTGG ACCT

SEQ ID NO:1541: (Length of Sequence = 403 Nucleotides)

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GIGATGTTAT ATCAGGTAAA ACCTGTCTAA GGAGAATAGA CAGTAGTTAG TTCAACTTAC TCATTACGTA TTAGGAAGAT  
 TAACCTGGTT ATCATTGTTT TATACATATA TATATGNAAT ATATATGAGT ATTCTGTATAA ATATAATACT TTTACCTTGT  
 TTATGTATTT ACTCAATATT CTCCTTTTCC TCTAAAATAA TCTGAAGTGA CTATTATCAA TAAGTTTACT ATGCCAAAAT  
 TCATTAAATTG CCTTTCACTT AACTTTTGGG GCCATAATAA ATAATAAAAT GTATTGCCAT AACATTAATA AACTACCTTA  
 CAAAACCACC AATTAAATC AAACAACCAA AAAGGTGTTA TTTACATCTG NNCACATAAA TCTACTAAAA ATACAGGTT  
 CAT

SEQ ID NO:1542: (Length of Sequence = 333 Nucleotides)

CTGGTACATG ANTTTATAAA AACATGTCAC GCGCGCTCT GTGGCTCATG CCTGTAATCC CAGCACTTTG GAAGGCCGAG  
 GCGGCGGNT CACAAGGTCA GGAGATCGAG ACCATCCTGG CTAAAACGGT GAAACCCGTC TCTACTAAAA ATACAAAAA  
 TTAGCCGGGC GTGGTGGTGG GCGCTGTAG TCCAGCTAC TCTGGAAGCT GAGGCAGGAG AATGGCATGA ACCNGAAGG  
 CGGAGTTTC AGTGAGCAGA GATCATGCCA CTGCACTNCA GCCTGGGTGA CAGAGCAGAG CGGGGACTCC GGAGCAATGG  
 GNAGTACAAT CCT

SEQ ID NO:1543: (Length of Sequence = 329 Nucleotides)

CCCCTGATAA ACCTATCAGA TTCTGTGAGA CTTATTCAAT GTCAATAGA ATAGCAGGGG AAAGACTGGC CCCCATGATT  
 CAATTACCTC CCCCTGCATC CTTCCACAA CATGTGGGAA TTGTGGGAGA TACAATTCAA GTTGAAATTT GGGAGCGGC  
 ACAGCTGAAC CATATCAGTC TGTATTATCT CTCNTTTTT CTGCTTTAAG NGAATATACG NAGGTGTTGT TTTCAGGNT  
 TATACATAGG TATTCTGAAA GATGGGGTTA TTTCTGTTT CANACTTTGA CTAAGTGGCT TCTTTGTCC CCTATGTGCC  
 AGAATAGCC

SEQ ID NO:1544: (Length of Sequence = 313 Nucleotides)

CGGAGATCCG TGATGTAACA AGGATTGANC GAATCGGTGC CCACTCCAC ATCCGGGGAC TGGGGCTGGA CGATGCCTTG  
 GAGCTCGGC AGGCTTCGCA AGGCATGGT GGTCACTGG CGGCACGGCG GCGGCTGGC GTGGTCTGG AGATGATCCG  
 GGAAGGGAAG ATTGCGGTC GGGCAGTCT TATTGCTGGC CAGCCGGCA CGGGGAAGAC GGCCATCGCC ATGGGCATGG  
 CGCAGGCCCT NGGCCCTGAC ACGCCATTCA CAGCCATCGC CGGCAGTNA AATCTTCTCC TGGAGATGAG CAA

SEQ ID NO:1545: (Length of Sequence = 384 Nucleotides)

CCCAAACCT GGAGCTAAGA ACTTCATCTC ACTTTTGACA CCCAGCCCC CAAAATATGG AAGCCCAGGA GAGCCAGGAG  
 AATTIATAGC AGAGGCTTAA AGAGAAAGTT ATGATTTGTT TAAAGTAGAG AATAAGGTGA AAAATAAAC CTGGTACTCT  
 GTCGTGAAGT CTTGGAAGTC TCTTGCCCA ACCTCAACTG GCCTGTGGC TCTGTINTCC TTGCTCTGGG ATGCCATGGT  
 GAATGTGAAA ACAGGGGAGG TTGTGTGTGG GGGTGGGAAT GGCCINTCGG TTGCAAGGCG AGTCTTTTGC TGAGCCAGC  
 CTGAGACCCA GCTTATGGGC TTTATCCAGG TGAGAAAATN CTGGGACAT GTGTTGAGG TTTA

SEQ ID NO:1546: (Length of Sequence = 345 Nucleotides)

TTTAAAGAAC AATGATTAAG TGAAAATNCT CTCAGTTTT TTTAATTGGT TCAGCAATTG ATTAATTACT GAATCTTGAC  
 CCTAAACTTT TTAGTCTAGA AATGTGCTTG AGGAATACAG GCTGGAGATC AGCTTTTGA CATTGCATTC CCTCCTGGN  
 TCACATCCAT GTTGAATCA ATTTATAAC TGCTTCCTA AGGCTTAAAA TGATGGTGAT CTACAGACAA GTGCTTCTCT  
 AGGCACAGGG TTGCTGGAGA CTGATGCCAG GCCCATGGCT CTTAAAGGGA AACTGAACT CATGGCAGAA ATGGTGGAAA  
 GTAGAGAAAT GAATAGAGG GGGAA

SEQ ID NO:1547: (Length of Sequence = 342 Nucleotides)

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GGAGGCTGAG GTGGGAGGNT CACTTGAGCC TGGGAGGTTG AGGCTGCACT GAGCTGTGAC TGCACCACTA TACTACAGCC  
 TGGGAGACAG AGTGAGACCC TGTCTCATAT ATATATATAT ATATGTATGT ATATATATGT ATGTATATAT ATCTCTAATA  
 TATTAATATA TATCTAATAA ATGTATCTTA TATATAATAA ATATATCTAA TATATAATAT ATATATTNCC NAGAGAGGGA  
 GAGGCTCTTA GGAAATTATC TTCTTGCAATA TTATGTTATA TTATGCTATA TTTGGCTATT TCCTAAGAGC TCTATCGTAT  
 TATTTCCATT TATTTGTGAG GA

SEQ ID NO:1548: (Length of Sequence = 334 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACATTC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCCGGGT  
 CAAAGTCAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGAAGT GGTATCCAGA  
 TAGGTTATCC TTGGAGAGTA TCCNGGGATG TCTCTTTTCC TAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG  
 AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTTGAGGAA TTCACGTAAG GNATGATAAT CTGAATTTTC AGGGCTAGGC  
 TCAGAAGCAG GAAT

SEQ ID NO:1549: (Length of Sequence = 362 Nucleotides)

AGGATTCTGG GGGCTTAGAG AGGGCAGCCT GGAGAAGCCA GAGTTAAGCT CAGAACAAGA GGTGCAGGAA GAGCCACAGC  
 AGGGAAGGGA AGAGAGATCC CAGAGGAGGG GCAGAGTNTG GCAGGACAAG GGCCCTGCCG TACATGCTAT GCATGAAGGA  
 AAATCTTGAG ACTAAGACTC ATGAAAAGNT CCAAATAAT TATTTCTGTG GGGCCCTAGA AGACTNAAGA GACATTINCT  
 TCGCCATTG CCCAGGGCTG CCTGGGCAGG AGACAAAGGA ATNAAAAGTC CAGGGGGAAA GCAAAAATCT ATGGGCTTCT  
 GAACACATGC TTCCCGGAGC TCGTCINCAC AGCATCTTCA CC

SEQ ID NO:1550: (Length of Sequence = 328 Nucleotides)

GGACTAATTA ACTAAGAGG TTTGTACAG CAAAGAAAC TGTC AACAGA GTAAACAGAC CTACAGAATG GGAGAAAATA  
 TTCACAACT ATGCACCCAA CAAAGCTCTA ATATCCAGAA TCTATAAGAA ACTTAAACCA TTGAACAACC AAAAAACAAA  
 CAACCCCAT AAAAGTGAC AAAAGTCATG AACTGACACT TCTCAAAAAA AAGACATACA AGCAGCCAAC AAGCATATAA  
 AAAATGCTTG ATATCATTA TATCAGATG AATGCAAATC AAAACCACCC AAGTCTTTTT CTTCTGTCTA GGNTAATTTA  
 TTTTAGGG

SEQ ID NO:1551: (Length of Sequence = 365 Nucleotides)

CAGGAATTTA CATGGGGAGA CCTACCTATG GCAGCTCTCG CCGTCGGGAT TACTATGACA GAGGATATGA TCGGGGCTAT  
 GATGATCGGG ACTACTATAG CAGATCATAC AGAGGAGGAG GTGGAGGAGG AGGAGGATGG AGAGCTGCCC AAGACAGGGA  
 TCAGATTTAT AGAAGGCGGT CACCTTCTCC TTACTATAGT CGTGGAGGAT ACAGATCAGG TTCCAGATCT CGATCATACT  
 CACCTCGTGG CTATTAAGC ATGAAGACTT TCTGAAACCT GCCCTAGAGC TGGGATATTG TTTGTGGGGC AATATTTTTN  
 ATTGCTCTT GTTTAAAAAG TGAACAGTGC CTAGTGAAGT TAGGT

SEQ ID NO:1552: (Length of Sequence = 330 Nucleotides)

GATCCAAAAA AATTTACTGA AATAGCAAAA ACGTGGACTT TGGGATTTCC TCTAACTGCT GCAAATTATA ACACAGAATT  
 GCTCAGTGTT AATACTTGAN TTGTGGGGCC AAGTCTTCTG GCTGCCCTAG TTCTCTTTTC TGGCATTTGA AAGCCCTTGA  
 GCTAGCTATG GAGCTAATCT TTGGACAGGC TTTTGTGTTT CCAGGAATGT CATGCCTTTG AATTTCCAAT CTATATATAT  
 ACAGTGTGTG TGTATGTATA NCTGTCTTTT CACTGTAAAG CACCTNCACC CATCCCTTAT AGAAGNGGC CACAAACAAT  
 CAAGCAAATG

SEQ ID NO:1553: (Length of Sequence = 304 Nucleotides)

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CCCTTGTCAC ACAGCCATTT AAAAATCTTC TGAAGGGCCT CAGGGCACAA AGTGATCATT TGGGATCCTA AGTTAAAAAG  
 GAAATGCAAG AGTAGGNTAC TCCAATTCCA GAGTCTTTGC AGGAGGCTAA TCCCACAAGA AGGGTAGCAT CAGAGAAGTG  
 GGCAITGGTC TTAGTGGTGG ATCATCAGGT AGACAAGTGA TAGTGTGTGT AACCCATCTG AAATTCATTT TACCGTCACC  
 ACTCTTACAA AGGACAGTTT ATTCCCAAGG ACAGTGCTGA CGGGGAGGGG GACAGGCAGG GAGT

SEQ ID NO:1554: (Length of Sequence = 309 Nucleotides)

TGTGTTACTG ACCATGTTTT TGAGAGTAGT GCCCCTAACC ACTTTGTCTC CACTTGCATA GTGTAGTGAT TTTNAGNCT  
 CTGTATGTCA TATTATAACA GAACTGACTG TATATGGCTA TTTTATCCCA TAATCAAGCC AATTCCTCCA GAATATTACC  
 ATCAGTATTA CCACATACAT CCTCCCAAAT CTTATTTCAA AGAATAAATA TATAGTCACT CATGGTTTTT AAGNAAACCC  
 AAAACTACTC AACCAAAACC TTGAGGAAGG TTTTCCAGG GNTTCTACC TTAATTATTC ATAATGATT

SEQ ID NO:1555: (Length of Sequence = 326 Nucleotides)

GTTTAAAAAC TGTCCAAATG TCATTTTAAT TTATGAAGGC ACCCAGAATA AGTNCCTAATC TCATACTGCC CCAATATATT  
 TNCIGAAGCC AATTCCTCTT TTTATTAATT TTTACTGAAA ATAGCACTTT TTTCTCTCCC CTGATAGTAC TGGGTAATGT  
 TAGAATGTCC TCTAAATTC TTTGGACCTT ATTTACATTC TCAAGAGNIT TTTTAAATTT TACCAATAAG ATGTGCTATT  
 TGAGGAATTA GACTTTAGTT CAGTTGTACA TGGNTATGT CTGCTCATAT CATTCATGTC TGAGNCTTTC ATTTTATTAA  
 TATGGG

SEQ ID NO:1556: (Length of Sequence = 375 Nucleotides)

CCCATCCCTG TTTAGGTGCT TTGTCTCCT TGAGGAGCCT CCAATGCTGC TGCTCCTATA CATGTCACAA TTTCAGACCC  
 AGCATGCTAG GAACTGCTGC CAGCGCCTGG TTAAGCCAACT ACTAAATGGG GCCAAACAGG TGAACAGACA TTCTGTCTTT  
 CTCCAAACCT CTGAAAAAGA TTCTGCACT CATCTCACAG TAATTTGTTC CCTAATTIAC TCTTAGGAAA TTGTCTTAA  
 AGTCTGATTA GGTAAAGTCC AATTCCCTGT AATTAGGATC CTCAGTGAAG AAAAATCTAC CCATCACCAC AATTTATTTT  
 CTTTCTATA GCTCCAGCAT CAGTAATTGT ACCATTATTT TTGGCAGCTC TGGGG

SEQ ID NO:1557: (Length of Sequence = 306 Nucleotides)

AATTCGGAAG ACTATTCCTA TACATTAGAG TGAATTINAG ACTATCTCCA TCATTCTCCA GCCATTCTTC AGTGGGAAAA  
 AAACGGTGGG ATTAACTAG TGGAACAAG GCTTCTCAT CTAGTCCCAA TCCAGTCGAT AAGCTGTGTT TNCCAATCAC  
 TGCTCCAGCA CAATGGCCCT CAGTTTATTT TTAAGTCTAT GGCATGCTG AAGGACCATG TTCCCATGAG TGACACCCCT  
 CTGTAAATGT GGTGGCATAT TATGGGCTGC TGTTTTAGAA GGGACTGNCA ACTTGCTGGG GGTIAT

SEQ ID NO:1558: (Length of Sequence = 292 Nucleotides)

AATTCGCCCT TTCCAAATGT ATTTTCAATC CCTTGAGTGT CTAGGCTTCC TGCTTTTAAG GCCTNCCCTC TAACCCAGGG  
 TTGCCCCATT CACCTTAAAA CATTTTCAA TAACCCAGAA AAAACCAGG TGAACATACC CAAGCTCCGG AACCCAGAAA  
 TTTTGTTCGA ACCCCGCTGA TGACTCCAG GGAAGCCAA GAGGACAAAG ACAAGGATGA GGACGAGGAC CCAGGGACCG  
 NTGGTGAATG GCAACTGCTG TCAACTTCAC TTTTCAACCT CAGNCAGTTT GT

SEQ ID NO:1559: (Length of Sequence = 246 Nucleotides)

GTGGTCCGTT CTCAGCCCAA CAAGAGTGAT CCTTTTAAGG TCCACACAG CTGCCTCTCC TTCTCCGCA TGAGCCTCTG  
 GCATGGTCTT TCCTCCAGCT GGGCCGGGCG TGGGCAGAGC CTCCTCTGC CGGGGCCCTT GCGCCACCCC TCCTTTGCCT  
 GGAGTNAGGG TGTTCATACC AAAGACGGAA CCAATTTCGCC TTTAAAGAAA ATATATNCAG AAGCAGCCGC TGCTCGNAG  
 CCCTGG

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SEQ ID NO:1560: (Length of Sequence = 383 Nucleotides)

CCAAAGGTAC AACAGATTAA CTACATTAA GACAGGAATC TTTTCTAATC TCTGTGCCTA TTAAAGAAGC CACCTGCTTA  
GAAGTACTTT GTAGATGAAA AAATACTTAT GAATCCACTG TAACTTCACA ATCTTGAATG CCAAGGAAAA ACTTTACTAG  
TTTCATTAC CACTATTCTT TAAAGTNCCT TTTGATTITA TGTTTTAAAT TTTTAAATTT TATATTTTGA GACAAGGTCT  
TGCTCTGTG CCCAGGCTGC GGGGCGATGG CATAAACGTG GCTCACTGTC ACTTTGACCT CCTGGGCTCA AGGAATCCTC  
CCATCTTAGN CTCCTGAGCA AACTGGGNCC ACAGGCATGC ACCATCATGN CCAGCTAATT TTT

SEQ ID NO:1561: (Length of Sequence = 313 Nucleotides)

CCCCCTCCAC CGCAGTCTGT GCCCCCGTCC CCACCACCAC CTTCCCAAC CACTTACAAC TGCCCCAAGT CCCCAACTCC  
AAGAGTCTAC GGGACGATTA AGCCTGCGTT CAATCAGAAT TCTGCCGCA AGGTGTCCCC CGCCACCAGG TCCGACACCG  
TGGCCACCAT GATGAGGGAG AAGGGGATGT ACTTCAGSAG AGAGCTGGAC CGTACTCTCT TGGACTCTGA AGANCTCTAC  
AGTCGGAATT NCGGCCGAA GNAACCTTC GNAACAAGAG AGGGCAGATG NCAGAAAACC CATACTCAGA GGT

SEQ ID NO:1562: (Length of Sequence = 320 Nucleotides)

AAACGGGCG CGAACGCGAG TATCATGCTG GCCAAGAAGA TCATCATTAA GGACGGAGGC ACGCCTCAAG GAATAGGTTT  
TCCTAGTGT TATCAGCGAG TTATCGTCAT CTTTTTGGAG TTTTTTGCTT GGGGACTATT GACAGCACC ACCTTGGTGG  
TATTACATGA AACCTTCTCT AACATACAG TGTGTAACAG TTCTAATACA GCAAATTTAA TACAATTTT TATTAGATCA  
AAATCAATA GAATGTTTCA TATGTTTTAA GGAAGGTTCA TTGAATTTCT TCTTTTCAAT GGAAGTCTTC ATTTGGAAAA

SEQ ID NO:1563: (Length of Sequence = 299 Nucleotides)

GCACAAGCAT GACCTGAACC TGTCACCTGC CGTNAGTAT TTCACATTC TATAGTTTTT TGTGATTCCTG CCTGCATTAA  
ATCATCATCA CCAACAAAA TAGTTCCTCT GAAGAATTAT TTATACTAG GATTCTCAGG NTATCTCTC TCAATCTCTA  
TTGGGATCAC TCCACTCTGA CTGTGACACT CATTTTCCCA CTGATGTAGC TGTTCTCAAG TTAGAAGTAA AGTTCTCAGT  
CTTCATTTTA TCAGTCATCT CAGCAGCATT CATTTATGGTT CAGGCACTCC CTCCTATT

SEQ ID NO:1564: (Length of Sequence = 325 Nucleotides)

CAGATGNTC AGTTCATACT CTGGCAGTAA ATTTTATTTT CTCTAAATAA AAATGGACAG GTTAATTTAT TAAGCAGCTG  
TGTTATCAAT ATGGTACGTG TGTGINCTTG TATAGATAGA TGTATATGTA CATAATAAC TATACATTTT NCTGGACACA  
TAAATTTTNA GGTGCCTATT GTATGCTAGA CACTGTTCTA CCATCAGTAA AAAAGCACTG CCCTGTTTTA CTGTTGATTA  
AAAACAAAAT TCTGAAAATA GTGANCAATG AGGCTTACAA CATTTGTTAC AGGNTAAGN ATCTCAATTT AGGAAAATGT  
TGTC

SEQ ID NO:1565: (Length of Sequence = 382 Nucleotides)

TTTTTTTTTA TATTAGTGCC TGCTTTTAA AAGTTATTT TACATTTTAA ATACAGTATT TTTCTCATAA AAAAAAATC  
CAGGAAGTGC CTAATCCAT GGTTCCTATA CCATATGTAC ATGAAAGCTG ACAGAGAGCC TGACAAATGT TCTGGATGTA  
ACAGTATGAA CACCTATGAG CTGGGACTAC TTCTGANTCA AAATTAAAA ACACAAATTA AGCACTGCTT AAGAAAAAAA  
AAATCCAGTT TCTGAACAAC CAAAAGAGAA CAGAGTTAGA TATGTACAA ACCAGGTATT AAAAANCAGN AAGGAATACA  
GCACAAAAA ACTCAACAN CCCATATGTA GTGAAGTGT TATACTGCAG TTAATGAAAA CC

SEQ ID NO:1566: (Length of Sequence = 305 Nucleotides)

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GCACTGTGGC TAATTGTAGC TCAAAAGATC TGCAGAGCTC CCAGGGCGGA CAGCAGCCTC GGGTGCAATC CTGGAGCCCC  
 CCAGTGAGGG GTATACCTCA NTTACCATGT GCCAAAGCAT TATACAATA TGAAGGAAAA GAGCCTGGAG ACCTTAAATT  
 CAGCAAAGGT GACATCATCA TTTTNGAAG ACAAGTGGAT GAAAATTGGT ACCATGGGGA AGTCAATGGA ATCCATGGCT  
 TTTTCCCCA CCAACTTTGT GCAGATTATT AAACCGTTAC CTCAGCCCCC ANCTCAGTGC AAAGC

SEQ ID NO:1567: (Length of Sequence = 292 Nucleotides)

GATTTCCCTG GGAAGACAA CATCACCAGC AAATGGATGA TTGTCAACTG GGGAGCCATT GACTCTCCAC TTGATTGTGG  
 GTTGAGGTTT TNCITCAGCC TCACATAACA AGATGCCATT GCTTCCGGTG CTATACACAG CACTCTGAGG CTCTTTGTG  
 CAGCGAGGAG GCTCTTCTAC TATAACGTGA AAATCGTGAG TGGCTGTTC CAAGAAATTG CTGGCTGTGC AGCGATAATT  
 TCCITTTGTC TGGTAGGAGA CATNCTCTAT CTCAAAGTC TTGCCATAAT TT

SEQ ID NO:1568: (Length of Sequence = 204 Nucleotides)

ACCTACTCAG GAGGCTGAGG CAGGAGAATA GCTGAACCC AGGAAGCGGA GGTGCAGTG AGCGAGGTC ATGCCACTGC  
 ACTCCAGCAT GGGCAATAGA GCGNACTCT NTCCCCCGG AAAAAAGAA CAAGGGCTAA NTTCAAATCA AATTTTCCCT  
 GTACCCTAAG AANAATAATT AGGNCGGGAG ATGTTTGAAT AAGT

SEQ ID NO:1569: (Length of Sequence = 362 Nucleotides)

CACAAAGCCA AGTACAGAAC CACAGAATGA AGCCGTCACA AATGTTGAAT CCCAAACAC TAACAGGAAC AACTCGTATT  
 TCCATTAAATC AAGATTTTAG TATACCAAT TTTCTAGTTT TTATCTCATG GAAATATAAG GGTATTTTAT CTTTGTATG  
 CTACTGAAGG GNAACATCA TCATACAGCA ATGAATACTT CAAGGGNCTT GTTGATCTCT CTATTATTGA CAGTGGGGTG  
 TTAAAGTCTC CCACTATTAT TGTGTGGNG GCTACANNC TTTGTAGGGC TCTAAGAAGG TGTTTTATGA ATCTGGGGG  
 TCCTCTTTGG GNGCATATAT AATTTAGGT AGTTAGTTCT CC

SEQ ID NO:1570: (Length of Sequence = 262 Nucleotides)

TGCTAAATGA TAGANGACAG ATTCAAAGTT GTAGTTACTG CGTAACTTTA TTTATGAGGC ATTTTAGAAT AGGCAAACT  
 GATCINTTGT GGTAGAAGTA AGAAGTGGG TACCTCTGG AGGAAGAGAA TTINCITTTGA AGTGGCATGA GAGGATTTT  
 TTGGCTAATG AAATTATTTT NATATCTGAG TAGGGTTGTG GGTACACAG TTTAGGCATT TTTCAAACT CATGGNACCA  
 TTCATCCAAG TCCTGTGCAT TT

SEQ ID NO:1571: (Length of Sequence = 402 Nucleotides)

TGCTAAATGA TAGAAGACAG ATTCAAAGTT GTAGTTACTG CGTAACTTTA TTTATGAGGC ATTTTAGAAT AGGCAAACT  
 GATCTGTTGT GGTAGAAGTA AGAAGTGGG TACCNCTGG AGGAAGAGAA TTINCITTTGA AGTGGCATGA GAGGATTTGT  
 TTGGCTAATG AAATTATTTT TATATCTGAG TAGGGTTGTG GGTACACAG TTTAGGCATT TGTCAAACT CATGGAACCA  
 TTCATCCAAG TCCTGTGCAT TTTACTGTTT GAAAATTATA TCTCGACTTT TTTCAAAAAA GAAAAAATA CTTAATTATA  
 ATATAGCATT TATGNATTAA AATAATCCN TTATGTAAAA ATATTTTATT GNTTGGTCA AGATTCATGA TTGCAAACT  
 CC

SEQ ID NO:1572: (Length of Sequence = 417 Nucleotides)

CTACCAGCCC GTTTTCACAA CTAGCAGCAA ATCCTGAAGC ATCCTTGGCC AACCGCAACA GCATGGTGAG CAGAGGCATG  
 ACAGGAAACA TAGGAGGACA GTTTGGCACT GGAATCAATC CTCAGATGCA GCAGAATGTN TTCCAGTATC CAGGAGCAGG  
 AATGTTCCCC CAAGGTGAGG CCAACTTTGC TCCATCTCTA AGCCCTGGGA GCTCCATGGT GCCGATGCCA ATCCCTCCTC  
 CTCAGAGTTC TCTTCTCCAG CAACTCCAC CTGCCTCCG GGTATCAGTC ACCAGACATG AAGGCCTGGC AGCAAGGAGC

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GATAGGAAAC AACAAATGTGT TCAGTCAAGC TGTCCAGAAC CAGNCCACGG CTGCACAGCC AGGNGTATAC AACAAACATGA  
GCATCACCGT TTTCAT

SEQ ID NO:1573: (Length of Sequence = 368 Nucleotides)

CAATAAGTT AGAAACATGA AAAATTCTTA GAACTTTAGA TGAAAAATTA AATTTACTAC TAATACCCAC CTGCAATAAT  
TTCCCGTAGT TTGGGATCTA GGTTTACAGT GCATGGCAA AAGACTTTTA CATCTGAGC CACAAGAACT GGGGTCCTTG  
AAGACAAAA CACTTCAAAA TTCTTATAT CTCCATCAAT TTCAAGAAGT GGCTCAACAT CCTTAGTTGT TGGAAATATC  
TTTGATATTC TTTCGTAGAT GGTTTTTAAT GTCATTTGAT CTGGAATACC TTCAGTCTCT TCCAAATATA ATATGAGNCA  
TGAAGTCCGG TATGGCCACT GCTCAGTAAG GTTGATCCCG CTAGCAAG

SEQ ID NO:1574: (Length of Sequence = 397 Nucleotides)

AATTTTAAGC AAATGTTATG TTTAAAGACT GTTTTGATGA AAACITTTAG AATTGAGTTA GTAGCAGAAT ACATAGCTAA  
ATGTACTTTN CTACAAATAG AATGAGATAT TTGATTTAAA ATATINCTTT CCTCTTGAAA TAGGATGTTA GATAGGGACA  
TCTCATTTTA CCTATCAAGT TCTGAGTCTT GCTTTAGAAC TACTTCTTTT AACTTAATIN CATGCATACA CTGGAAGACA  
ATAATATGGC TTTTAACTG CATTATCTTT AGTTGAAACT GATGGAGAAA CAAAATACT GCTTATACCA TATTGGGTAC  
ATGCTGAATG TTTTAAAGA CTAGCCAAAA CTGACATTTT TTAATAATTA ATAAGATGTT TTAGTTTCAA ATTAGAG

SEQ ID NO:1575: (Length of Sequence = 296 Nucleotides)

GGACTCAGCC TTCCGCGGCA TCTGCATGAT GATCGGTGTC AACCCGGGGG GCGTTGTGCA GGTGCGGCA GCTGGGCTCT  
NAGGGCAGGC GCGGGCNCCTG GGCTCGGGCG GCCCCTCACC TGGGATCCGT CACGTTTCAG GACTTTATTT TCTTCTTCAA  
TGNIGTAGCC TCCTGGGTGA GCCCGAAGAT NACCTTCGGG ACATGTTTTA TAAGGTGAGG CTCGTCTGG GCCCTGATCT  
AGTTCGGGA GCAGGCAGGA NGTGAGACCA TCTGTTAACA ATNGGGGCTN GGGATT

SEQ ID NO:1576: (Length of Sequence = 289 Nucleotides)

CTTATGAAG TAGTAATTCC TGAGAGTGT GCTGGCTGAA AACATAATAG GTTCTGGAAG AGCCAGGTAA ATGCTGGNT  
TTAGACATGC AGGGGTTAAT CAAAATAATT TAGGAGCGTT TTCAGCTGGT GAGCCTCATA TGGGATCTTC GAACCCGTGG  
CGAGAAGAAA ACCGGTGTIT AGNAGCACC AGGCACAGTG CTCGGAAGGG AGAGGCTNGC CGGCCAGTGT GCAGCTCAGC  
TNTTTCGAGG ACGGAACCCG CAGCCTNGCT GTNTCCAGC AGACCCAGG

SEQ ID NO:1577: (Length of Sequence = 320 Nucleotides)

CAGACTCTAC TCAGATTTCC CGCTATGCC CCTAGGACAG AGCTGGAAGG GAAGGAGGCT GGGCCTATTT AGTCATAATG  
CCTCCCCACC AGGTCTAGCT TTCATTCATC CATGAACCT CACCAAGGG CCAAGAACTG AGTTCAGTGC ACCCTGGACC  
CCTGTTGAGG TAGGAGAAGT AGACGTTGGG AGCAAGGTTT CTCTCCTAAT TTINTTGCAT CCCCTCAGTG CCCAGCACAG  
CTCCGGATAC AGGCAGGTT CACAGTCAGC GTGTTACCT GGGNCTGTGT ATGCACCTAA GGAAAAGNCT CAATTTCTCT

SEQ ID NO:1578: (Length of Sequence = 217 Nucleotides)

AATCAGGAGA ACTGTTAGAG CCATACCAGA GAAAATCACA AGAAAGGCAG GACTGCAAAG NTCTAGTGA GGTGTGAGA  
AAAGGTAAAC CCCTTCTTAA GCTCATCTGC CCCTTAGTT ACCACTGGCT GTCTCACTCC TGGATTTATG TGACTCCCTT  
AGCTATACTT TCCCANCCCC CTGGGATGTT CCCCACTCAT CCTATTCAT CACAAAG

SEQ ID NO:1579: (Length of Sequence = 375 Nucleotides)

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TTGGTCCTCA AGTCCTAATT TAAATTTTG TCAATTAGAG GACTCTTGGT TCTCTTGGTT GACTCATTCT CTGCTGATTT  
 GTTCTCTGTA CTTCAGCAA ATAAAGTGCA GTCATTGAGA ATGNCCTGT GTCAGTGA TGTATCAAGG GATCTTCATG  
 TTAATATCTG TTTCTCTGAC AACTGTGTTT TATACTTTGT ACTGTAGCTT TCATTGGAGA AGCCCTGGGC TCATAAGAT  
 GATTGTGTTG GGCATTTCCT TATGGAACAT AAGCTTTTGA AATATACTTG AGGTAAATAT TCATGGGAGA CATCCAAATG  
 CAGTAATGAG AGTACAATGA AGACAGCATT TTNGACTTTG GAAACCTGAG TTCAA

SEQ ID NO:1580: (Length of Sequence = 325 Nucleotides)

TCTNCTGATG CACCCATGAG AGGGGAGACA GCACTGTCTG CTCTCGCAGT TTCCCTTAA CACTCCCTTA TCTGCAGACT  
 TAAACTAGGA GCCCCTGGCA GAGTCTTACC TCCAGAATCA CAAAAGTGTA GAAGGAAAGT GAGAGACATT GATTGACTTT  
 ATATCTGACT TACTAGTTTC CTAAGGCAGA GATTTTTTAG AAAACTGCCT GGCCTGGCCC AGCCCAGGAT AGATAGGGAT  
 GGGTAAGAAG CCTTNAGAA TGTGGCAGTA TGTGGCTTNG ACTTCAGACT TGTCAGATTA GGGGTTTTAT AGGGTTTTTT  
 TTAC

SEQ ID NO:1581: (Length of Sequence = 402 Nucleotides)

GCAGATCAAG AAAAAGTTTC AGCCAATGAA CAAGATCGAG AGGAGCATAC TACATGATGT GGTGGAAGTG GCTGGCCTGA  
 CATCCTTCTC CTTTGGGGAA GATGATGACT GTGCTATGT CATGNTCTTC AAAAAGGAGT TTGCACCTTC AGATGAAGAG  
 CTAGACTCTT ACCGTCGTGG AGAGGAATGG GACCCCCAGA AGGCTGAGGA GAAGCGGAAG TTGAAAGGAG CTGCCCCAGA  
 GGCAAGAGGA GGAGGCAGCC CAGCAGGGGC CTGTGGTGGT GAGCCCTGCC AGCGACTACA AGGACAAGTN CAGCCACCTC  
 ATCGGCAAGG GAGCAGCCAA AGACGGAGNC CACATTCTAC AAGGCCAATA AAGACCTACG GCTTTTTTTC CNTGGCCAAT  
 AA

SEQ ID NO:1582: (Length of Sequence = 286 Nucleotides)

TCTTAGTTGA TTAAAACAAA TAATTGAAAT AAAAAATTAT GTTTATNCTT ACATGTATGC CATGTAGCAC TTTAAGGAGA  
 TGAGTTTATG AAATTCATGA ATGAGAGSAT GATGTAAGTT TAAAATCAT TATTTTAGTT GCTTTATTCT NCTATTTTAA  
 ATTCAATAAT AACACAGGTG GCGTGTATTT TGAAAAGAGC CCTTCTCTCC ATTTGANCCT TATAAACACT GAGGCACTAG  
 GTGTAAAATA TTATCTCCAC TTATATTTG AAGGAAATGG GGGCCA

SEQ ID NO:1583: (Length of Sequence = 323 Nucleotides)

CTAATTTTGT TATTTTGTAGT AGAGATGGGG TTTCACCATG TTGGCCAGAC TGGTCTCAA CTCTGACCT CAGGTGATCC  
 GCGTGCCTTG GCTCCCAA GTGCCAGNT TATAGGCATG AGCCACCACG CCTGGCCTTC CAGTTGTGAC CTTGTTAGGA  
 TACTGCTTTA ATTCAATTTT CCATTGAAAA TAAGCATGAA AATACTGTG CAGTCATAAT TGTGGTATTT NCTGTAAGG  
 AAAGTGGCAG GGTCTGAGT GTTTATCGGG AGACCTAACC CAGTNCAGA GGGGAAGTCA GAAGGCTTAC TNCCAATGG  
 GGG

SEQ ID NO:1584: (Length of Sequence = 301 Nucleotides)

AAATACTTGT AAATCATTAT ATGTTTCTGA GTAAGGAAGT AATGAAACAT ACGTACAAGT AATCAGTAAG ACTTGTTAGA  
 CAGCTGTGTG TCAGGATGCC TTAAAAGGG CTGGTAATGC AGTTACATTC TAACAGAGAA GTCCAAACTA CAGGTAAAAA  
 CTACGGCTTG TACTGTGAAA AATGTGCAGC TTTTCAGTTA TAAACTAGT TGAACACTGG TTTACAAGGT AATCGTAGG  
 AACAGAGAGA CTGTAGGAAA ATATTCCAGC ACTTTGAGTT GTGTTTGGC AGCAGCATTT G

SEQ ID NO:1585: (Length of Sequence = 328 Nucleotides)



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AAATACTGAT TTCAGACCTT CTTGCTCTAG AAGTCAAAAT ACTTTCCCCC TGACAAGAGG TAAGATAAGG TAGAAAATAG  
 AAACACTGGA AGAGAGATCT GGACTOCTAA AGCTGTGATG CCATAGTGTA GTGGGGGGGG GTGCGTGAGG AAGTCAGGAA  
 TGCCGCAATG TTAAAGGGAA AGGGAAGATG GAGCAAAGTG AGTCCAGGG CCAGCAGGGG GCCAGCCTTN TTTGACAGGG  
 GCAGGGGAGA AAAGGCCAGA CTTCCCATAC ACATGCTAGA GGGGAGGGCT AGTGTGAAG GGTAAATAAGT TGAAGGAGTC  
 CACGGGCT

SEQ ID NO:1586: (Length of Sequence = 256 Nucleotides)

GGACTATCTG TATGGCAGAC TCATCAACTT TGAGAAGAGG AGGAAGGAGT TCGAGGTGAT CGCCAGATC AAGCTGCTGC  
 AGTCGGCCTG CAACAACTAC AGCATTGCGC CAGATGAGCA ATTGGGGGCC TGGTTCGGG CGGTGGAGCG CTCAGCGAGA  
 CTNAGAGCTA CAACCTGTG TCGAGCTGG AGCCCCATC CGAGTCAGCC AGCAACACCC TCAGGACCAA GAAGAACACA  
 GCCATTNCA AGCGCT

SEQ ID NO:1587: (Length of Sequence = 371 Nucleotides)

GGATTCTACA GGCATAGACT TACAGAGTT TCTGATTAC ACATTAAAGA ATAATTCCAG GGACAGGATG ATACTTTGA  
 AAATGGAGCA GGAAATTATT GATTTCATTG CTGACAACAA TAATCATTAT AAAAAGTTCC CTCAGATGTC ATCGTATCAG  
 AGGATGCTTG TCCATCGAGT GGCAGCTTAT TTTGGATTGG TTCACAATGT GGATCAAACA GGNAAATCTG TTATCATCAA  
 CAAGNCCAGC AGCACCAGAA INTIACCAGC CAGTCTTGTC TNGTCAACAG GGGNTTCCAA GGGCTAATAG GAGTNCAGCA  
 GCCCACTCA GAGTCAGACG TGGTTAAATN ACCCCCAAGG GACTCCGGTG C

SEQ ID NO:1588: (Length of Sequence = 314 Nucleotides)

CACACAGGAT TCCATAATAC TCTGCTGTG TCTGAATAT TTGTACTTCA CATGGGATTA CTGAACACTA CTACGAGATT  
 CTGAATGTTT GINGCTCACA TAGGATTCCA AAATGCCCCCT GCTGTGTCT GTTTGTCCCT CACATAGGGT CACTGCTGCT  
 GGGTTCTCAG TGTTCCTCAC TCACATAGAA TTCCAGNACA CTGCGAAGAA TTTCTGAATG GTTTCTGTA ACATAGTATT  
 CCAGCACACT CTCGCTGTTG TTGAATGTT TGTCCCTCAC ATAGGATTCC AGAACACTTC TGCTGATGTC TTGA

SEQ ID NO:1589: (Length of Sequence = 256 Nucleotides)

GACGAGGCAC CATGCGTGAN ATCGTGACCA TCCAGNGGG CCANINCGGC AACCAGATCG GNGCCAAGTT TTGGGAGGTC  
 ATCAGTGATG AGCATGGGAT TGACCCCACT GGCAGTTACC ATGGAGACAG TGATTGTCAG CTNGAGAGAN TCAATGTTTA  
 CTACAATGAA GCCACTGGTA ACAAATATGT TCCTCGGGCC ATCTCTGTGG ATCTGGAGCC AGGCACGATG GATTCTGTTA  
 GGTCINGACC ATTCGG

SEQ ID NO:1590: (Length of Sequence = 313 Nucleotides)

GGCAACAAGC CAAGTAGCAA AGATATAAGC AACAATCAAA TGGAGCCTGA AATATGATAA GAGCATACAT GCACITTAAC  
 AATAATTTTG ATACTGGAAT GATTATTTCA GAAGCAATAT TTTTNCIGAA AAGCATTGGT CTTCTGTACA GAAAAATAAA  
 AAAGTGAGCT GCCACTCATA GTGAATTAAG AGCTGTGGGC TGAAAGGGTC TCTTTTATAG CCAGTTTGAA ATTTTTCATA  
 TAATAAAAAC AGTATGTAAA TATTATATAT ATATACACAC ATACATATAT ATGCATATAT GTACATATTT CTG

SEQ ID NO:1591: (Length of Sequence = 296 Nucleotides)

TTNAGTCTC CGGCCTCACA ATTCAGCGAC TGCAGCTCG CCAAGGCCAG GGGAGACCTG GGTGCCTTCA GCAAAGGTCA  
 GATGCAGAAG CCAATTGAAG ACCCCTGGTT TCGCGCGCGG ACGGGGAGA TGAGCGGGAC AGTGTTCACG GATTCCGGCA  
 TCCACGTCA TGTCCGCACG GAGTAGGATT NGGGGCCAG GCCTGGCCTC GGGGTTCCTC CGCTGCCTGC TGGCCAGTGG  
 CNGAACCCCC CANTNCCTGC CACTNCAACA CAGTATTTAT TGTACCAA ATGGCT

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SEQ ID NO:1592: (Length of Sequence = 299 Nucleotides)

GGAATTCCCA AATTATGGGT AGTCCAAAAG CCAAGGCCAA TGTGAGGAAG GACACTCCCC AGATAAGAAC AAAACAGAA  
 ATCTGTATGT NCTATGTGTT ACACACAGTT GCGAATAATC AGATGTACAC ACATGATGCA AAGGCACGCC GCTACACATT  
 TATGTGATAT TCAGACATAT GTTCAAATAG AGGAGGTGAA TATCTTTTAA TAAATACAAT TTAGCAAGTA CAAGAATGCT  
 GATCAGCTGC AGCTCAAGAG GAAAGGGGGG AAAAAATCTT ATGGGAAATT ATTAATACT

SEQ ID NO:1593: (Length of Sequence = 378 Nucleotides)

CCAGTTTGGT GATTCTNTTC TGTGCTGCT GATCTATTGG CGTGAGAAGC TGAAAGTGAC CAGCCAACAG CCATAACTTT  
 ATGTTTAGTG AGACTCATAA TGGGTCTCCT GCTGGAAGAT CTCCCCTCTA AGANTCAGTA ATTCTAGACC TGCAAAGTTT  
 GAAGTTGTAA GCATGGGAAA CACAAATTCC CCAATAGGT CCAGATAGTG ATAGAGAATA AGACACTTAC TTGCCTACTT  
 CCATTCTCTA GCCCAGATAT TCTACCTATA GTGGACATGC CCATGCAATG GGCTATTGGG TTTGAGGTAT ACATTGCACC  
 GTTGAAGGAC AGTGCCCTCAT CCTTGCAGGG GTGCCCTTTN CCAGTTGGCA CCACAGCT

SEQ ID NO:1594: (Length of Sequence = 353 Nucleotides)

ATTTTTCGG GGGAGGTGTA TGTAGATGAG AGTCTATGAT ATAAAGCAGT AAAAAAATG CTGTTGTATA GGGATGCAAT  
 ATTTTCGGTG TAAGGAAGAG GTTTTAATTC ATAAATAGA AACAGGTTG GAGAAGTCTT TAGGAAAGGG ATACCTTTTG  
 GGTGGCTTT TGAAGGAGAA GTTTATACCC AGGTTCAAGC TGAAGGGCTA AGTGAGTAAC TGAAAGGGCT GAGCTATTTG  
 GATTACCATG AGGAATTTGT GATGGCTGGG AATGTAGGT GTGTGACCAG ATGTGGAATC ACAGAGGGAG CCCACAGAGG  
 AGCTTGGCA CATAANCTAA AGAGTTTAAT TTT

SEQ ID NO:1595: (Length of Sequence = 343 Nucleotides)

CAATATATTA AATCTATTTT GTAGCTGGAC TTCACTTACA ATGTAACAGA ACATTGAATA TTAGATTCTG AGCATATTCA  
 TGCAAACCTC CACTTTGGTG AAAGTGATGA CAGTGGAGTT CTGGAAGACA ATTTTCCTTG TAAACACCAA GTTTTGCACT  
 TTGGACTATG CTCTCAAGAT AGAACTTAC GTGAGTGGAA AAAGAAAATG TATAAATGTG AACAAATATT CCTTACCACA  
 CAGAATAACC CTGGCAACAA ACAATATCCC CAAGTCTGG GINATTCAAT CCTCACCGTG GGCAGGAAGG GTGAAGGAGG  
 CTGCACCTGG GNCACAGCCT TTT

SEQ ID NO:1596: (Length of Sequence = 373 Nucleotides)

TAGTCAGTTA TTGCTGCACT AGAGCTAAAT AAAAGACATA AATATCTAAG GCACTTACTG GAATAAACAT CTTATTTCCG  
 CTAAGAGGTT GGCTAGGGAA GCTCTGCTTC AGAGTATGGG TTGAGTATAA GCCTGTNCCA CATGCTTTT GCTCTGGGAC  
 CAGGAGTTGT GCAGCCCATC CTTTCTCAA GACAAAAGCT GAGCCAAGCA AGGACATTTA AAGCTTCACT TCTGCTCACA  
 TCATATCTAT TGGNCAAACA TTCCATTGGG CCAAGCAAA TCACATGGGC CAAGTCAAGC ATCAGTAGGT CTGGGGGAAT  
 ATTCTTTCCT CTACTCTGG ACACATGGGA AAGGGTTATG CATACTAATT CTT

SEQ ID NO:1597: (Length of Sequence = 276 Nucleotides)

GATTGTCCAT ACTTGATTAT TAGTTCTTAA AGAAAGTATT CTTAATTCCA AGCCTAATAG CTCATTATGC ATTAGTTTCT  
 AGTGCAGAGA AATGTACTTG ATGAATTTT GTTGACTTTT TTTTGTGCTA GCCAATATGA AGGTTGCCAG TCCCTGCCAA  
 AATCAGCACT AAAACIATTT TNCATGAGTA ATAACAATA TATTCTTTT TAAATAGCAC CTTTAACCCA AAAATCTTAA  
 GCCTATATAA ACATTCACTC AACANTACAC TCAAAA

SEQ ID NO:1598: (Length of Sequence = 355 Nucleotides)

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TGTATTGCTA ACTGTCTTTG TAACTAATTT ATGTATACNC TAAATGGTAT AGCATGTGAT TTTATTATAG TTGATTAACT  
 TTGTAATTNC TGTAAGTCGA TCGATATCCC AGTCTAOCCTG GAAAATTAAG TCTATTAACC ATAGTTGCTG TGGGAGACAG  
 TACTATTGCC AACTGAAGCC TGAATCCTTC ATTTATTTTG TCCCCAGTTA CAGAGTGGAG GTTTAGAGGA GTGGGGTTAG  
 ATAATGCTCA GATTAGAAAT ACAAAGGCAG CTGTCAGATC CTCCCATTTT ATTTGTTTGA AGGAACTGAG GTTGGTAAAC  
 ATCACAAGNG CTAGTTAACT GGTGAGTAGC AGCCC

SEQ ID NO:1599: (Length of Sequence = 313 Nucleotides)

GGAGGTGAAG GACACAGTGG ATGGGCAGAG GNTCCTGGAG AAGAAGGGCA GINCTGCNCT CAAGGACCTC AAGCGGCANT  
 GCATTTGGAG CGGAAACGGG CAGATAAGCT GCAGGAGCGA CTNCAGGACA TCCTCACTAA CAGCAAGAGC CGCTCAGGCC  
 TTNAGGAGCT GGTTCCTCA GAGATGAAGT CACCAAGCCG GACCCAGACA GGGGACAGCA GTAGCATCTC CTCCTTCAGC  
 TACCGGAGGA TCTTTCGGGA AAAGGAGGAG CTTCGGCTTG TTCCAGCCAG GTCCTTATCC AGCAGNCCIN AAG

SEQ ID NO:1600: (Length of Sequence = 277 Nucleotides)

AGTTCACAGA ACTCCAATTC TTTATTATC ACAGCTTGCT CACAATGACA TACAGGAAAA TAGCACTAAT GAAGAGTAAA  
 TATGCAGGCA GCAACCTTCA GGAGTTGGGA GTTGGGGAGA AACGACTTCA AAATGCGAT AGGTACTTAT GGTGGGTATC  
 TGGTGATTCT TAGTTGGCAC AAATGCCCTG CCTAGCCCCC TTAAGTGGT CANTTTCACA GATGGAGTGT TTTGTGTGTG  
 GTGTGTGTAG TAGGCAGGAT TGCCTTACAC TGGGGGA

SEQ ID NO:1601: (Length of Sequence = 228 Nucleotides)

TTGAGACCAT CCAGGCTAAC ACGGTGAAAC CCCGTCTCTA CTAAAAATCC AAAAAAAAAA AAAAAAATT AGCCGGGGGT  
 GGTGGCTTGC GCCTGAAGTC CCAGCCACTA AGGAGGCTGA GGCAGGAGAA TGGCATGAAC CTGGGAGGCG GAGTTGCAGT  
 GAGCCGAGAT CGCGCCACTG CACTCCAGCC TCGGCGACAA AGCAAGACTC TGTCTCAAAA AAAAAAA

SEQ ID NO:1602: (Length of Sequence = 299 Nucleotides)

GGAAAGTCTT TCTAATGAAG AGGGGAGATG TTATCGATTA TNCATCATCA GGGGTTTCCA CCAACGATGC TTCCCCCTG  
 GTTCTTATCA CTGAAGAAGA TGAAAAATCA GATCAGTCAG GCAGTAAGCT TCTCCCAGGC AAGAAATCTT CCGAAAGGTC  
 AAGCCTCTTC CAGACAGATT TGAAGCTTAA GGAAGTGGG CTGCGCTATC AAAAACTCCC AAGTGACGAG GATGAATCTG  
 GCACAGAAGA ATCAGATAAC ACTCCACTGC TCAAAGGATG ACAAAGACAG NAAAGCCGA

SEQ ID NO:1603: (Length of Sequence = 263 Nucleotides)

AAGGCAAGAA ATTAGCCTTG TTAAGAATTT TAAGTGTAAT GGAAGCCAT TAGAGGGTTT TAAACAAGGA AAGATGTGAT  
 GTGACTTATA TTCTAATAGG ATTGCCTTGA TTCACCTATG GAGAATGGAT TNNTGGGATC TCAGTACTGG GATACTGAGA  
 TCCAGGGGGG AAAATATCAC TAAGGTTGGA ATTGCTTTTC TGCACATTAA AAGCAATTCT CTTTTCCTT GAAACCTCCA  
 TGTGATGTTA ATTAGGGTAA ATG

SEQ ID NO:1604: (Length of Sequence = 260 Nucleotides)

ATGAAGACGT ACGACTTATT TTGTGTCTT GAACATAAGT NCTTTGTAC ATAAAAATGTG CTATGAATGT TGAGTTTAA  
 ATACTCGAGC GGTGACTCAC GCTGTATC CCAGCACTTC GGGAGGCCAA GGCGGGCGGT TCACCTGAGG TCAGGAGTTC  
 GAAACCACTC TGGCAAACAT GGTGAAAACC CCGTCTCTAC TAAAAATACA AAAGTAGCGG GGTGTCTGTG CGTATGCTGG  
 TAATCCTAGG GTTCTGTCA

SEQ ID NO:1605: (Length of Sequence = 290 Nucleotides)

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GACAGACATT CAAACCATGG CAGGTGGCAA GAAGTATCAA ACTIACATAGAT CCTTGGGATT GTNCTTTGTA CTGGGGTGTG  
 TTTTNNCCAA CAATCCTAAA AATCATATGA ATAGAGATAG CAATATATAT CTNACCCATT TGGAAATGCA CAGAGATTCA  
 GGAGTGTTC CATAGAAACA GAAGATCATT GGCTTTTGTG CATTCCCAAC GCCAGNAATC TGTTTTCCTT GACTCTTTTT  
 GATCTGTGTT TCTGAATGTT TTGATATACT GCGCCTACTG GGTGTGCAGG

SEQ ID NO:1606: (Length of Sequence = 290 Nucleotides)

CTCACTTGGG TACTACAGTG TGAAGCTGA GTGCATATGG TATATTINAT TCATTTTTGT AAAGCGTTCT GTTTTGTGTT  
 TACTAATTGG GATGTCATAG TACTTGGCTG CCGGGTTTGT TTGTTTTTGG GGAAATTTTG AAAAGTGGAG TTGATATIAA  
 AAATAAATGT GTATGTGTGT ACATATATAT ACACACACAT ACACATATAT TATGCATGTG GTGAAAAGAA TTGGCTAGAT  
 AGGGGATTTT CCTGAACACT GCAAAAATAG AACGTAGCAA AATGGCTTCA

SEQ ID NO:1607: (Length of Sequence = 365 Nucleotides)

GCTCCACTGA CCAGCTGTTC CCTGTCTCTC CTTCTCCCTG AGCCTCCCTC TTCCTGAGA CACAATAATA TTAAAATTTG  
 GCCAATCAAT AACTCAACAA TGGTGTCTAA TAATTGTTC GGTGCGAGGA AGAGGCATAC ATCTCTCACT TTAAATCAAA  
 AGCTAGAAAT GATTAAGCTT AGTGAGGAAG GCATGTCAAA AGCCGAGACA GACCAAAAGC TAGGCCCTTT GTGCCAGTTA  
 GCTAAGATGT GACTATAAAG AAAAGCTGTC GAGGGAAATT TAGAATGGTA CTCCAGGGGA ACACACAATG ATAAGGAAGC  
 AAACAGCCCT ACTACTNGGA TATGGGAAA AGTTTTGAGC TTTGG

SEQ ID NO:1608: (Length of Sequence = 294 Nucleotides)

CTCAGGAAGC CTCTCTTCT TCACCTACCA TTACTAACCT TCCAAGCATA GAAATCCCTG GGAATTGCGA GAATAACTCC  
 CACTATTTTA AAATTTATAT TCAGATTTGT TTCGTTTCAT AAGACACATC AAACAGGCCT ATACAAAAGG TTTAGGAAAA  
 GAAAACAATG GTGAGTCCCG GCCCTCTTCG AATTCACCTG CACCTCATGC AAGTNTAGGA AGGCACGCTG GATCGTCTAT  
 CTGATTCCAA AGCTGTCTT TGCCATCTCA TCCTTGAGC TGCCCCCA CCGT

SEQ ID NO:1609: (Length of Sequence = 393 Nucleotides)

CAAAAGCTAA CTCTTAATAA GAAGATGAGG AAATAAAATC AGTTCAAAAG GGAGGAATAT GCATTCCAG AATTAAAGGA  
 CCCCAGGTCC AGTTTGAGGA GGAATCTTGG CCAGATACAA GCCCCTTGT TAATNCTCAA GAGGGAGGAG ACCTTATTIN  
 CTCCTINGAG GTGTCTAGTA TGAAANCTGC TTATTTTGAA ATGTGATCT AGCCATTATC AGGNGCAACT GCAGATAATT  
 CCCATTTACA GAGGAATGCT GCTAACAGGT GTGGGNGGGA GCAGCGACAN CGNAAAATTC TGCTGTGATA GTTCACGTTT  
 ATGTTGGTTT TCTTTGAAA TCAAGGGGTA GAAAATTTCA TGCTCTAGA GGAGAGAGAG GAAACACATG AGG

SEQ ID NO:1610: (Length of Sequence = 464 Nucleotides)

TGTCGTGATT TATTAAATTG CCTTTACTAC TTTTAGATGG CCATACGTTT TCAAAAGCAA AGACCTAGTA AGCCATTGT  
 GTTCATTTGC TAAGCTATCT TAGGTACAGG TCCAGATTAT AAATGTTACC TGCTAATCAG AGAGCAAATT TTTAAATTAA  
 TCCTTGTAA ATCCACATTA AAAGAAAAAG AAAGTTAGAA AAACACATAA ATTTCTTTTG TGATCCCACT ATTCAGSAAA  
 ATCCATTGAA AAAGCAGATG ACTTATCCGT GTTAAATTTT TAAAGNCCCT ATTTAACTG TCATGTAAAT TCTNATTTAT  
 CTAATTTTTT AAAACACATA TAGNNTTTTA CTCCTCAGTT CCATAANTGN CTCANTCTG GTGANGGTCA TTACAACAGN  
 CATACGNGS GCATATCGGN NTAAAANGGC CNTGCGSTCC TGNATNGAG GNGGGTTAA GGTC

SEQ ID NO:1611: (Length of Sequence = 465 Nucleotides)

ATAATTTAAA GAAAAGAGAA TTCTACAATG TAAACCCCTT TAATATAAGC TGTTTTAATA ATTGGAAAAC AGAATGANTA  
 NTGTTTTINT TTGTCATGCC CAATTATTTT ANCAAGTTTT TATTAATAAC TTGCTACATG GTAGGCACAG CTGTAGGTGT

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TGGAGATATA GAGGTAAACA AGTCTGACAT GATCTATGCT ACCACGGAGT TCTTATTTTC AAAGTGAAG GTAGAAAATA  
 AATAAAAATG ANCTAGAAGA GCAAAGTGCC TCTGAATGAG CATGCAGANG CATGTTTTC AAATGTCTGT GNGTGGGATA  
 AATAGATCAG CAACACACCA GGCCATGCAA TTINGCAGCA AATCACTTCT GCAGTCTAGC TGCTGTTTTT CCTACTCTGG  
 AATCATACTC CCCCCTTCGG TCATCINTGC CAGTTTCNCT GNGCTTCACC CTACCCTCN TTTTN

SEQ ID NO:1612: (Length of Sequence = 458 Nucleotides)

ATGAAATTGA ACAACCTAA AGAGAAATGT TCTTACCGTT CCACAGGAAC CAGCTTCTTC CACTGGGCCA CTAGGTCCCT  
 GGCAAAGCTT CCAACATGCT CGTGTTCG CAAGCTATTT ACTGTTTTC CAACCCAGT CTCCTAAAAT TTGACAAAGT  
 AATTGTTAGA GGGGTCTGGA ACTAGGCTAA CGTTTTCTA AAGAAATAAG GCTTTCTACT TTGAGAACT CAACAAGCAA  
 TACTTCCTTC CTACAACATA CCCTGCAAT CTTAACAATA AATTACTTTG TGTCTATGNC CCAAATCTCT AATGACACAC  
 AGTAGCAAAG NGTACCAAGT TCAGAACITT AATAACAGNG GTNATTAGGG CAGGTGTTAG GGCCTAGNT AAGNGCTTTG  
 CATCAGTTCT GGATCAGNCT TTTAATAAC CCCTTAAGNG GGGNTNAGNC CCTTTTTT

SEQ ID NO:1613: (Length of Sequence = 322 Nucleotides)

ATGTGGAGAT TTGTTGTTGG CTAGGGCAGT CCAGAGGAGA GATATGTGGC AGGACAAGTC TCTACCCTAT ACAAGTNCCT  
 CCGGAAGCC CTCAGCACAT GACATAGGCC CAGAGAAGGA TGCAAGAAT TCTGGTCATA AATTGTTTTT AAATATCAAA  
 TAAATCATAT GTGCACATGC ACAACATGC CTTCACAACT GAGTAAACC AGACTCACCT TCAATATAT CAACAGTTTT  
 NCAAGCGCC GTTAAAAATC AGGCATCGGA CCTCTGNNIN CGAGAGCTGG TTINATGGGG AAGTTAGATC AACCGTCAT  
 CT

SEQ ID NO:1614: (Length of Sequence = 280 Nucleotides)

AGTATCAAGG GATAAAATAT ATTTTAAAT TTGTATTTC CTTGAAAT GTAAAGNCCA TTTTATAATG TATTGCTTGC  
 AAAATAAGTC ATGGAAGCCC TGAAAAATTA GTCAATTCAC TAATCAAAGA AACATATATT AAAGACCTAC TATGCATGAG  
 GCACCATGCT AATTGCTTTG AAGAAGACAA AGTTGAATTA GACAGGNTC CCGTTTACAA GNTATTTACA ATGCAAAGGG  
 GGATACAAGA CATATAAAG GCTATGGAAC TGCCCTTCOG

SEQ ID NO:1615: (Length of Sequence = 393 Nucleotides)

GCGTGGTGGT GCGTGCCGT AAATCCAGC TACTACGAG TCTGAGGCAG GAAATCCCT TGAACCAGGG AGTCGGAGGT  
 TGCAGTGAGC CGAGAGCAG CCACTNCACT CCCGCTAGC GACAGANTGA GACTCCGTCT CAAAACAAA CAAAACAAA  
 CAAAACCA AAAACACTGG GAGTCCAGT TTGTAGGAAA TCATTAGAT TTTATTATTT GAGCTCCAGA ACGAGTGAGG  
 ATGACCTGAT AATTTTGGTT TGGCTCAGT TGTAAATGTT TCTGTTTTG CTCGATGACT ACTAGAACAG TTCTCAAACT  
 GTGTGGTGGG TAAGAATCAC CTGGGGACTT TGACCAAGTN ACATGTCTAC AACACCCGGC CCTACAGGC TCT

SEQ ID NO:1616: (Length of Sequence = 353 Nucleotides)

CCACCCAGC CTCCTTGAG CTATCCCTTT CTATCCCTCT CCATCCAGCC CCTGGCCACC ACCATTATAT CTATTCTGGA  
 ATTCCACAG GAAAGCAGG CACTTTATAA ATCAGCGAGG GATTCAAGGC GAAATGAGAC TGTTCTGAG TNATGGCGTN  
 CCGGGTTGCT TGCCGGTGCT GGCCGCCGNC GGGAGAGCCC GGGGCAGAGC AGAGGTGCTC ATCAGCACTG TAGGCCCGGA  
 AGATTGINTG GINCCGTTCC TGACCCGNC TAAGTCCCT GTCTTGAGC TGGATAGCGG CANCTANCTN TTCTCCACTA  
 GTGCAATCTG CGATATTTT TTTTTGTTA TCT

SEQ ID NO:1617: (Length of Sequence = 227 Nucleotides)

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TTTCTTCCAT GCAACANTCT GNAGACTTAA GTGGCTTTCT NCTGTACTNC CATAGAACCC ACCCAGTACA TACCTCCAGT  
 GNGGCACTGA TTTTATGCTA TACATATGAC TGTGTGTTC TCTCTCCAC CAGACTGTGA GTCCCATGG AGTAGGAACT  
 AAATTTTNTT CAACACTCTG TCTTCATCAG CTCGTGTAGT ATCTGTGACA GAGTAGATAA TGATTAA

SEQ ID NO:1618: (Length of Sequence = 362 Nucleotides)

GGAAGGTTTT TAATGCATGA NGTATACITG TNATCCTGGA GGTGGAAAA GATTGAGTAA AGATAAAGTT TGGCAAAAAT  
 GATTCTCTCC CTAGGATTG GGGATATGTA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCTT CATTTTTTGT  
 CCTAGATTGA GTTATCTATC AAGAATCATT CATTCCCTCT CAGCCCTTGC AACTGTTTCC TATGACTTTG GACTTGGCCA  
 TGCAACTTGC TTTGGCCAAT ACAATGTGAG TTAATGTGCT TTAAGTGCAT GTAATTAGGT CAGTCCCTCC CTCCTTGAGC  
 TTCAACTCTC CACCATGAGG ACAACATTGC CCTCCTCCTT GG

SEQ ID NO:1619: (Length of Sequence = 344 Nucleotides)

GCAACCTCAT CCCAGGTTCAGTATCTC CTGCTCANC CTCCTGAGTA GCTGGGATTA CTGGCGCACC ACCACACCCG  
 GCTAATTTTG TATTTTTAGT AGAGACAGGG TTTCGCCATG TTGGCCAGGC TGGTCTTGAA CTCTGACCT CAGGTGATCC  
 ACCACCTCA GCCTTCCAAA GTGCTGGGAT TCCAGGCATG AGCTACTGTA TCGGCCAAA TCTTCTTAA GTGTGTCTG  
 GCCTTTGGCA GAAATAGCCA CAAAGNCAGG GTAGGAACGT TTTACTCTTC AAGTGATGAT GGCATCCGAT AANCTTTTAG  
 AGGGAGGTTT TTAATAATGCA AGT

SEQ ID NO:1620: (Length of Sequence = 379 Nucleotides)

GCCAGCCGAA GCTCCTCAGG CTCCACCCCT CTACAAGCTC CTTCTGCTCC AGCCACACTC ACCAGGCCCG AGTTCCACC  
 TAGCACCTTC CTTGGGAATN ATCTCCCCCT GGTGGCTCT TTTACTTAT TCAGCCTCAA ATGTATCTC CACTGANAGG  
 CCTTCTCGA CTTGCTGAGC TTGATTCCCT CCCCTCCCA GTACATTAC TCCGTGTTAT GGTACCCATC CTTGCTCTCT  
 TAGCTTGTTT TTGCTGTAT TGGCTCTTC ACTAGACTGT AAGCTGCATG AGGGCAGGGG ATGTCTGTTT AATNCCAGTT  
 GCTCAGGATA GTGTATGCT CGTATAGAT GCCTAGNACA TTTTAAATG GGGACGGAT

SEQ ID NO:1621: (Length of Sequence = 283 Nucleotides)

GATTTGGGGG CTCGGGGAGG CAGAGAATCT CTTGGGAGTC TTGGGTGGCG CTGGTGCAAT CTGTTTCTC TTGATCTCAA  
 AGGACAATGT GGATTINGGG ACCAAAGGTC AGGGACACAT CCCCTTAGAG GACCTGAGTT TNGGAGAGTG GTGAGTGGAA  
 GGGAGGAGCA GCAAGAAGCA GCCTGTTTC ACTCAGCTTA ATTCTCTTC CCAGATAAGG CAAGCCAGTC ATGGAATCTT  
 GCTGCAGGAC CTCCCTCTAC TACTTCTGT CCTAAAAATA GGG

SEQ ID NO:1622: (Length of Sequence = 356 Nucleotides)

TTAATTTTAA AGCAGATAAT ATTTCAAATA TTTTCTTTGA AATAGACCAT TTGTCTGCC TTGAAGTATG TTAGTACATT  
 TTAAGAAAGT CAGTGGGTTA AGGAGTCAGT GCTGTITAGTA TTCATGCTTA AAACACTTCC CTCTACCTA CCTAATAAA  
 TGAGGGGCTC AAGAGAAATA TTCTAATTC TCTAGCGACA TGGCTAATTT TTTTTTTTAA TGTATTTTGT TATTTTGTG  
 ACAGATGGAG TTTCACCATG TTGGTCAGGC TGGTCTCAA CTCCTGAGCT CAAGTGATCT GCCTACCTCA GGCTCTGAG  
 TCACTGAGAC TGTAGTTGTG TGCCACCATG CCAGGT

SEQ ID NO:1623: (Length of Sequence = 361 Nucleotides)

TTTGAGACAG AGTCTCGCTC TTTCGCCAG GCTGGACTGC AGTGGCACTA TCTCAGCTCA CTGCAAGCTC CACCTCCCGG  
 GTTCACGCCA TTCTCTGCC TCAGCCTCC GAGTAGCTGG GACTACAGGC GCGCGCACCC ACGCCTGGNT AATTTTTTGT  
 ATTTTTAGTA GAGACGGGGT TTNACCATGT TAGCCAGGAT GGTCTCGATC TCCTGACCTC GTTGATCCGC CTGCCTCGN

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CTCCCAAAGN GTTGGGATTA CAGNGTGAG CANCCGTGCC CAGCCGTNAA GTTAAGATAT TTTAAAAANA TCTCTGCAAG  
TTGAGGAAGT NPTTCAGGAC TCTTCCTGC TTAGTCTCAC T

SEQ ID NO:1624: (Length of Sequence = 350 Nucleotides)

CTTTGTGAGC TTTTIGACCT GCGGGATCCG AGCCAGATTG ACAACAATGA GCCCTACATG AAGATCCCTT GCAATGACTC  
TAAAATCACC AGTGCTGTTT GGGGACCCCT GGGGGAGTGC ATCATCGCTG GCCATGAGAG TGGAGAGCTC AACCAGTATA  
GTGCCAAGTC TGGAGAGGTG TTGGTGAATG TTAAGGAGCA CTCCCGGCAG ATCAACGACA TCCAGTTATC CAGGGACATG  
ACCATGTTTN TGACCGGCTC CAAGGACAAC ACAGCCAAGC TTTTGTACTC CACAACCTT GAACATCAGA AGACTTTCCG  
GACAGAACGT CCTGTCAACT CAGCTGCCCT

SEQ ID NO:1625: (Length of Sequence = 333 Nucleotides)

GTCTTCTGTG AGACAAAGAA ATTATAAAGA TGGCAGAAAT TATTAGCGAC GTTCTACCTC TATAATTAC GTTCCATGAA  
TCAGTACTTC ATTTCTTTTT TATGGATGAA TTAATATTCC ACTGTACAAA TATACCACAT CTGTGTTTTT CATTOGTCTA  
GGTAAAAA TTTTATTTT TATTTTATTT TTTTGTAGA GACGGGATCT CACTGTGTTG CCCAGGCTGG TCTTGACCTC  
CTGGGCTCAA GTGATCCTCC CACCGTGGCA GTCCAAAGTG GGTAACTGT ACGCTGGTCT GAAAGACCTT GCTGAAGAGA  
GAAGAGGCAA GCT

SEQ ID NO:1626: (Length of Sequence = 314 Nucleotides)

GACTGTCCGT GGACACTGGT TTTTAAGCCC AAGAACTGAA TATACAGTAG CAGTGCAGAC TGCCTCAAAA CAAGTTGATG  
GTGATTATGT TGTGTCTGAA TGGAGTGAAA TTATAGAATT CTGCACCGCA GACTATTCAA AAGTTCATCT AACACAATTG  
TTGGAGAAGG CTGAAGTAT TNCAGGACGC ATGCTTAAGT TTTCTGTTTT TTATCGTAAT CAGCACAAAG NATATTTTGA  
CTATGTTCCG TAAGNTTCAA AAATATATAG TGATTGTGTT TACTAAATAT AGTTTCAAAT TCTAGGCTCA GGGT

SEQ ID NO:1627: (Length of Sequence = 375 Nucleotides)

CCCTGGGCAC CTGGTACCTG GGGACCTACA AGGTGGTGAG GGAAGGGTAC GAGTACATTC CTNTCCCTC TGACCTGGGC  
GCTAGAAGGG CAAAGAACCC GAGCCTGCCA GCTTGGCCCTC CTCCACAGC CTCCCTCGGA GGCATGCCAT GCCAAGCACT  
CTTCTGTCT CTGTTTATGA ATAAAGAGA TGGATGGGCT TATCTTATA GAGAAGTGAA TTTCACTTAC TCCCTGGCC  
CGAAAAC TAG ACCAAATGAG GAAGTGTGTT AGCTCATCAA ACTGTTATAT TTATTTTCAA CAATGAAAAC AACACAACAA  
AGTGGAGTCA ATCCACTAAT TTTTAAAT CTACACAAT TGTTGCACA ACAAT

SEQ ID NO:1628: (Length of Sequence = 434 Nucleotides)

TGCACAGGCA CACCTCCACT CTTTATATCA TTTCTCCAT CTTCATTTC CCATCTGTAC CTCCAAAAT TTGCTATGAA  
TCTAATTCAT CTTTGCTCTC TCTCTCAT GGGTGCCCTT GCTCTGCCA GCTTTCTTC TCTGCCCA CCCAACTTC  
ATGAATTAGT CTTTCTCCC AGGAGCTCTG ATTTCTAGAC TGCTTTGAAA ATGCTGTATT CATTTTGCTA ACTTAGTATT  
TGGGTACCT GCTCTTGGC TGTCTTTTT CTGGAGCCCT TCTCAGTCAA GTCTGCCGA TGTCTTCTT TACCTAECCT  
TCAGTTTTCC TTAACCGNG NACACAACCTC TGGAGAGTGT TAAGNATAAT GTTACTTGGT AATGTGTATT TATTGAGGAT  
TGTTGTGCTA AGAATGNGTA GGTAAAAATA GGGG

SEQ ID NO:1629: (Length of Sequence = 341 Nucleotides)

CCTCAAAGCT GCAGGGAGGT GGGGGTGGCC GGCAGACAGG GTGGGGTCCG CATCCGGTAC CAGTGACAGC AGCCTCTCCT  
CTCCACGGT GGTGCTGTG TGGGGCTGTG GCCAAAGTGT TTGCCCGGCC CCTGACTGTA TCCTCCGGA GCTGCCGAGG  
ACTGCAGAGA GGGCCTGGCT TGTCCCTCT AGGAGCAGCT GGGNNGGTGT CTGCTGCA TCCCCCTCA ATGGTTGAAA

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ATAATGATTG CACTTGTGAT GAACACCATG AAGGTATCTT GGCAGCCAGA GTCACCTCTG TTCCCGAAGT GGGAAACCTN  
GGGAGGGTCC TCAAAACCCC T

SEQ ID NO:1630: (Length of Sequence = 380 Nucleotides)

CATAAAACCA TCCTACGATG TGCTGCTGCT GCTGCTGCTG CTAGTGCTCC TGCTGCAGGC CGGCCTCAAC ACGGGCACCG  
CCATCCAGTG CGTGCGCTTC AAGGTGAGTG CAAGGCTGCA GGGTGCTCC TGCGACACCC AGAACGGCCC GCAGGAGCGC  
CTGGCTGGGG AAGTGGCCAG GAGCCCCCTG AAGGAGTTG ACAAGGAGAA AGCCTGGAGA GCCGTCGTGG TGCAAATGGC  
CCAGTGACCC CCAGACGGG AAACCGGGTG GCAGCGCCAG CCTGGGCCCA GGCATGGAAA CGGACAACCC CTAATCGCCT  
TAGCTACTGC TTCTAACAAC TCTTTTCCCT TGTGTTAAGG GAAACAGGT TCAAGGGGGG

SEQ ID NO:1631: (Length of Sequence = 383 Nucleotides)

AGAGATTITA TTTGACAGG GCTGTGCTGA GAGTCCACC CTCACCCAC AATGGGCGGG GGCCTGGA TCGAACACCA  
AGCTGAGTGA GAAGGGCTCC TCCAGGCCTC GCAGGAGCT TGCTGGCTTC TCCTGGCTCA CAGCAGACTG GGCCCGACTC  
CCATCGGAGG AAGGCCAGCA TCCTAGGGCA GCCAGTGGAG GGCTGGCAGA GGGCTGTGCC TNGAAGGTCA CTGTGCTATC  
TTCCAACCA ACTGTGTGAG TCTCAGATAC CATATGTGGA ATCTGCATCA GGAAGGTCAA CTTGAGGTCA TTTTAAAGG  
GATTCTTCCG GNAAGAGGAG CNCCGCATCG GCGNCTTAA NCCGCGTTC CGTTCATCC CGA

SEQ ID NO:1632: (Length of Sequence = 424 Nucleotides)

GGGAAGTGAG CTCCTGAACC AACTCTGAAG GAGACACCA CTGTCTAAGC CAGTCTCACT CTAGGACACC TGCCTAGCGA  
CCAGCAAACC TGGAAATGAAA GGGCAAGTTC CTCAGTGGCC CCTCTGCATC AAAGGGAGTG GCTCTGCCCT CTCTAGTCTC  
TGACTACCTG CTTAGTGATT TTTGCTTCTG TGCTCCAGA CCAAGAAAA CCACGTCTCT TTTCTTCTT CATGACTCA  
TCCCCTTCTT ACCCTATATT GTCTCTCCA CTCTCTGCT CTGCTGGCCA GGCTTAAATC TGGGCCACCA GCCTTCTGG  
GACATACCTA TTTCCGCAAC TGAACCTTCC CAACCCCTAG GAAACAAAG GTATTTTACA AGGCCTCTGG ACCTTGACCC  
AAGAGGCAT GNACCATAAT TACT

SEQ ID NO:1633: (Length of Sequence = 417 Nucleotides)

TTTTTCTAC AGCATCTTTT TATTGTCTTT ACCATTACTT TAATGCATTT TAAATTTAT CTACATTAAT TGGGAACAT  
TTGCATTTT TTCACTCTCT CTCTCTTTT CTTTNCITTT TTTTGGATTT GTCTTGCCA GAGAGGTCT CCAACACCCG  
GGTGGACTTG GAATTTTTTA TCAGCTGCAA TCTGAAGACT TGCTTTACT GTGGAATAGG TGACATTCCT TTAGGACCTC  
AGAAGCTCAA GTAGTTTAAAT GCCAAGTCTT TCCAGAGCCT CACTCTCTT TATTTTTTAA ATTAGAATTG TGATTTATTG  
AAGNCTTACC ATGGGGTTCA TATAATTINT NAATNGANCA GCTTTATGA GGTATAATTC AATACCCCTT TAAAGNATGT  
AACCGTGGG TTTAGAC

SEQ ID NO:1634: (Length of Sequence = 423 Nucleotides)

AATATCCCAA ATGTGCAATG CATCACTGA GACAGAAGGC AGAAAGCATC AAGCTCTCTG TTTATCCCAA TTCAATGACA  
ACCAGAACTT ATTTTTTTTG AGATGGGGTC TCGTCTGTC GCCAGGCTG GAGTGCACTG GGGCAITCAT GGCTCATCGC  
AGCCTCCAAC TCTCAGTCTC AAGCAACCCCT CCTACGTCAG TGTCTGAGT AGCTGGAATC ACAGGCATGC ACCACCACAC  
TTGGCTCATT TTTAAAAAT TTCTGTAGA GACAGGATCT TGCTACATG CCCAGGCTTG AGGTGCCGTG GTGCATTAC  
AGCTCACCGC AGCTCAAACCT CTTTGGTCTC AAGGATCTCT CTTGNTCAG CTTCTGSGT GGCTGGGCCT CAGGCATACA  
CCACCATGTC TTGGTCAATT TCT

SEQ ID NO:1635: (Length of Sequence = 384 Nucleotides)



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CAAAACTCAC TTTGACCCCA TTAAGAGGCA AGCCTGGCAC ATCTATCCCT GGGCCTTTAG AAAGCCATTT GCCTCAAATG  
GCTATAGGGT TGTGGGGTGG AGGGAGGAAG GGCTGGGAGG GAGTNGGGAG GAATTGCTAG CTGTAGTGTG ACACATTGTA  
GTGTTTGCCA GGAAATGAGC CAGACATGGT GGTGTATGCC TGTAGTCCCA GCCACCCAGA AGGCTGAGGC AGGAGGATCG  
CTTGAGACCA AGAGTTTGAG CCTGCGGTA GCTGTAAATG ACCACGGCAC TCAAGCCTGG GCAATGTAGC AAGATCCTGT  
TNTCTACAAG AAATTTTTTA AAAATGAGC CAAGTTTGGG TGGTGCATGC CTGTAGTTCC ACTA

SEQ ID NO:1636: (Length of Sequence = 362 Nucleotides)

CAAAATGACT GACTACAGCA ATGCCTTCG TGTGCCCCAC ACATCATGAG CACCGCAAGA GACAAAAGAT TAACTATGAA  
ATATAGTAAT CTAAGCAAGC CCACACATAC ATATTTTTTG GGATTTCCTA CCATCCTGAA TAGTATCACT GCAGTTGACA  
CAACTTCCAG GGAAGTGCAG AGTAAGTCT TAATATTATC CACGAGAAAG CAAAATAAA TATTAGTGTG CACATTTCGT  
AATGAGAAAC TAATGCTTC ATTGATTCA ACAATGTAGT GGNAGNAAAC TATTTAGAT CTCTACAATG CCTAAATGCA  
TTCTATTAA ACTCAAGGTA CTATTTTCAT TTTTACCATA CT

SEQ ID NO:1637: (Length of Sequence = 205 Nucleotides)

GGGCCCCGAC GAGGCTCAGA CCTCTNTAC GNCAGTACT ACGAGGACGG CGAGGTGGAG GAGGAGGCCG ACAGCTGCTT  
CGGGGACGAT GAGGATNACT CTGGCAGGA GGAGTCCINA CACCACCAGA ATAAACTGCG CGAGTTTANC TCCTAGGGC  
CGGACCCGTG GCTCCTTAGA CGACAGACTA CCTCACGGAG GTTTT

SEQ ID NO:1638: (Length of Sequence = 253 Nucleotides)

CATCAGGCT CACCGTCTG CTCTGCGAC CAGCCTTCC AGAGCATNCC AGTNCATG GCTTCATCTG TTAAGTGTG  
ATCATTCAG TCCGATTTT TAGACCTAAA TGGTTTCCTT AAGGCCATTC TAACTGCCG TGACTCATTT TCCTTACAG  
TGTATTATGT AACGCCAAAC CAACAAATCA CAGGTGCTTG CTCTGTCCA TAAATCTCCC CAGTCTAACT TTTTGTCAAT  
CAACATGRCT CGT

SEQ ID NO:1639: (Length of Sequence = 360 Nucleotides)

TGTGGCCAAG GACCTATCG TCAATGTATG GTACTCTGTG AATGGTGAGA GGCTGGGCAC CTACATGGGC CATACCGGAG  
CTGTGTGGTG TGTGGAGCT GACTGGGACA CCAAGCATGT CCTCACTGGC TCAGCTGACA ACAGCTGTNG TCTCTGGGAC  
TGTGAACAG GAAAGCAGCT GGCCCTTCTC AAGACCAAT CGGCTGTCCG GACCTGCGGT TTINACTTTG GGGGCAACAT  
CATCATGTTT TCCACGGACA AGCAGATGGG CTACCACTGC TTTTGTGAGC TTTTTTTGAC CTGCGGGATC CGAGCCAGAT  
TGACAACAAA TGAGCCCCTA CATGAAGATC CCTTGCAATG

SEQ ID NO:1640: (Length of Sequence = 321 Nucleotides)

GTGGGAGGCC CTCGCTTG TCCTGAGAGC AATGTCTTCT CCATGGGGCA GCATNGGCC TGGATGGGCC TGAGCATAGC  
AGACCAGTG GTCACATGTG CATGTGTGGA CATGTGTGCA TGTGTGGATA TGTATGCTCC TGAGTGTATC TGCATGCTCT  
NCCTGCACAC ACAGTGCTCC CCTCCGATGC TGCCAGCCTG TGGTGGACTT CCTCTCTGA CCCCTTTCTT GCNCCGGNC  
TGTATTATCA GTGAAAGGAC TTAACAAAGC AGATCTCCAG GTTCACCTIN TGGAAGTCAG CTCAAGGTA GCACAGCAGG  
T

SEQ ID NO:1641: (Length of Sequence = 266 Nucleotides)

GGTGTGCCA CTGTGTGAT AGTTTTCCTC ATCTTAGTAG CCGNACCAT AATTAAAGCC TACTCACATC AAGTTAGCAC  
CACTCAAATG TGGGCCATTC ACAGGCAGCC AGGGATCCTC TTGNNCCGTG AGGTGGGGG CTTCATCAG AATGCAAATC

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TRCCGAGGCG TGAAGCACAA TTTAKTTCAA CTGCCATKTK TTCCCTTCACA GTAAERCCTT CTGGRGGAAG GAAGCAGTGT  
GTTTGAGTTA TACCTTAGGC CAAGCT

SEQ ID NO:1642: (Length of Sequence = 295 Nucleotides)

AAAAGCCCCA GCGTCAGGAC CCCGGTCACA GGCACCCGGG GGTGGGGGTG ACCAGCAGCA GTTCAGAGGC AGGTGTGGGC  
AATGTGGGCC TGAGTCTCCT NCCCACTCAC GTCACINCCC GCGGGGACAC AGCGGCATTT NTGGGGCACT NGGCATGCCG  
GGTTCCCTAAC CTCAATTATT CATTCTGCTC TCAGGCACCT CCTGACGAGA CCCTGGGCCA GGAGAGCTCG GCTCGGGGAC  
AGAGGAATGA GACTCAGTGG GACGCAGAGN CCAACCCCAT CCCCACCCCT GGGCT

SEQ ID NO:1643: (Length of Sequence = 359 Nucleotides)

ATCATTGGTA GTTTAAACTT TTCTCTAAT ATTAGATTGC ATGCAGGATT TTATATCTAA TTA CTCTGGC AGATGGCCTT  
TAGAAAGTTC AAAAATAAAA TGCAGCAATT CATATTGGCA GATTTACTAT TGAGACCAAT GCTTTCTTAA CTAAAAGGTT  
TTGTTTAAAA TCGTTAGTTT AGGAAATCTG ATAAAGATTT TTGAATATCA GAGCGTTTAA AAGAGATTCT TACTTTACAT  
CTGGCATATT TCTTGTTGTTA CATATTATAA TTCCATTGGA ACATGGCTGT CTGTAAACT ATGTATATGA TCCGGAAGAG  
ACTCAAATTA AATTAAAGTT TAACAGCCAT CAAGTTTCA

SEQ ID NO:1644: (Length of Sequence = 293 Nucleotides)

TGAACCCGGG NGGCGGASTT GCAGTCAGCC GAGATGGCAC CACTGCCTC CAGCCTGGGT GACAGAGCCA GACTCTGTCT  
CAAGAAAAAA AAAAGAATTA AAAGATGTGA ACAAAGCAA GAAAGTGTG TATGAACGAA ACGGAAATAT CAATGAAGAG  
AAATAAAAT TATAAATTC AGGAAATGAG ANGTACANTA NCAGNAAATT CACTGGAGAG ATTCAAAGC ATATCTGAGC  
AGGTAAAAAA AGTAGTGAAC ATGAGATAGG TCAAGGGAAA AGTACTGAGT CTG

SEQ ID NO:1645: (Length of Sequence = 332 Nucleotides)

AAAAGCTGGA TATTAGGAAA TGTGAATATT AATTCTGAAT TTGTTACTGA CTCAGGATGA CCTTGCTATGA TGCATCCAAC  
CTTCTTTTCT CTATATCAGA AAATAAAGA ATAAATGTAA CATCACATTC TTCTCTCCTT TGGGACAAAC AACTATGTAC  
AATTGAATAA AAATGAAATT GCATAAGTNG TGGATAGAAT ATGTTTGGGT TGGTTTGAAC TTAGCACACT GTTTAATAAT  
TCAACATTTT TTATACCTGT GCAATAAATT TTAAATGAT GTCTGAAATG CTTTGAAATC TTCAGAAACA GGTTTATAAA  
TGGCATAAAA AA

SEQ ID NO:1646: (Length of Sequence = 210 Nucleotides)

GAAAGTNCCT CCAATCACTC TCTGCACAAT GAAGTGGCGG ATGACTCCCA GCTTGAAAAG GCAAATCTCA TAGAGCTGGA  
AGATGACAGT CACAGCGGAA AGCGGTGGAA TCCACATAG CCTGAGTGGC CTGCAAGATC CAATTATAGC TCGGATGTCC  
ATTTGTTTCA AAGACAAGAA AAGCCCTTCC GAATGCAGCT TTGTTAGCCA

SEQ ID NO:1647: (Length of Sequence = 246 Nucleotides)

TCCACTCCAA GGGTTTCTGA CCCAAGAGGT GGGGACCAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT  
GCTGGACTGA GGACCACACT TTGAGAACCT GTGCTCTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA  
CTNAGGAGTA GCTGAGAGGA AAATNAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCACAG GAGCAGACAG AGAAATGTGA  
AGGGTT

SEQ ID NO:1648: (Length of Sequence = 338 Nucleotides)

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TCCACTCCAA GGGTTTCIGA CCCAAGAGGT GGGGACCAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT  
 GCTGGACTGA GGACCACACT TTGAGAACCT GTGCTCTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA  
 CTGAGGAGTA GCTGAGAGGA AATGAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCAGAG GAGCAGACAG AGAAATGTGA  
 AGGGTGGGGT TTTATGINTG GGAAAGGGAC CCGAAGOCCA GGCTGAAGAG TTTTAACTTT GGGCCCAGAA ACTCAACCAT  
 CAATGGAAAC AGGGCAGT

SEQ ID NO:1649: (Length of Sequence = 275 Nucleotides)

GCACCTINAG GATTGAGACC CGGAAGGCTT CAAAGGCTGT CGCAAGGAGG AAGAAGTGA AGAAGTTCGG GAAGTCAGAG  
 TTTGACCCCC COGGACCCAA TGTGGCCACC ACCACTGTCA GTGACGATGT CTCTATGAGG TTCATCACCA GCAAAGAGGA  
 CCTGAACTGC CAGGAGGAGG AGGACCCTAT GAACAACTC AAGGGCCAGA AGATCGTGTG CTGCCGCATC TNCAGGGCG  
 ACCACTTGA CCACCCGNTG CCCCTACAAG GATAC

SEQ ID NO:1650: (Length of Sequence = 270 Nucleotides)

AAAAGCCAGA GGGATGAGAA TGAGAAAGTT AAAAGGGAGG TCAGGAAAGC CATCTTTTAG GAGAAATATA AATNGACAAT  
 SCTTTAAAA AGGAGCTGCC ATCATATTAT ACCCTGACCC AGCTGGATAC GAACAAATTC AGCCTTGGCA ATGCAAGTCT  
 TACATCTATT TTATATAGAT TGTATAAAG AGAACTGGAA GCATTTTCAA GAGGGGTATG TATGTGTTTG TGTGTGCTG  
 GTAATTAATG AAAGAGAGGC TATTGAATTT

SEQ ID NO:1651: (Length of Sequence = 372 Nucleotides)

TCTTGCTTTT TAATTGIATT TCTTAACACT AGAATTTTCT ATTTCAAGTT TTTGTACGTG GCCTTGCCTC TCCTTAGTAC  
 ATTTTATAGT CGCTGTAAAT TGATTCCATT TTTCTTGAAA TTGAATTCTC ATCTGACCTA ATTTCTTCCT TGAATCCTAC  
 ATCTCACTTT CTCAATGGAC GCAGTGACGC AATGAAGCAT CCAGCAAAGC TTTGTGTGTT GATGTGTTAG GAGTCACCC  
 TGTGTTTGTG GAAGTGTGCT CACAACACT TCTCTTTCTG CTTTCTCTCT TTCATATTGA CATGTGTTTT CTTTTCAAT  
 GGATTAACIT TATTGATCAT CCTCTGTGNC TTCTAGCAAA AGACGGGTGC TT

SEQ ID NO:1652: (Length of Sequence = 314 Nucleotides)

TTTCTGAGTA TGCTGCACCT GATTATTAGC ATGTTAAATA GTCAAAGGGA CTGGAATAAA CATCAGGAAG ATTTCAATAA  
 GTGGTGTAAG TAGAAAAAAA AGGTTAAACA ATGAGCTGCA TGTGTATAAG TATAAGACAC TGATCCAAGT GGTGGCTTCT  
 GAACCATGAT ATTACTTAAN CTAGAGTGTG AAGGTCAGCT TAAGTCAAAA TAAACAAAG CTCCAAACC CTCATTTTAA  
 ACACAGTAGA TAATAGATGA NTCTGTATC TTGGGAGATA GTACAAGCCA AANGTTACAG CTGTGTTAAA ACCT

SEQ ID NO:1653: (Length of Sequence = 323 Nucleotides)

TAGATATGAT GGCTGGAGCT GCAATAGCTA ACTTGCAACT ATGAGGAAGT ATAGGACTTT GGTCTTAACA TTCTGAGCT  
 CCTGAATCAA TACTTTAACT ACCTTCTATG AGACTTCTTG TCACATGAGA AAAATTAAGC CCCAAATTAA ACCCTGCTT  
 TINACTGTAA CTCTCAATTG AGCATAATTC CTAAATGNTT TAATCAATTC TACTCTACTC TGGCATGATT TINAAGGCAT  
 TAACCATAAT TTCTTCCAA TCTAAAAAGG GAACIANIAC TTAGTGGAGT ATCTAGTATA CATCAGATAC TGTGTATATA  
 GGC

SEQ ID NO:1654: (Length of Sequence = 352 Nucleotides)

ATCTTGGCCT GCAGGAACAT GGCAAGGGCG AGTGAAGCAG TGTCAGCAT TTTAGAAGAA TGGCATAAAG CCAAGGTAGA  
 AGCAATGACC CTGGACCTCG CTCTGCTCCG TAGCGTGACG CATTTTGCTG AAGCAATCAA GGCCAAGAAT GTGCCCTCTC  
 ATGTGCTTGT GTGCAACGCA GCACTTTTG CTCTACCCTG GAGTCTCACC AAAGATGGCC TGGAGACCAC CTTTCAAGTG

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AATCATCTGG GGCACITCTA CCTGTCCAG CTCCCTCCAG GGATGTTTTG GTGCCGCTCA GCTCCTGCCG GTGTCAITGT  
GGGTCTCCTC AGAGTCCCCA TCGATTTACA GG

SEQ ID NO:1655: (Length of Sequence = 325 Nucleotides)

AGGGTAAATT GTGAGACTGT TTGTATATAT TTTTGTITTA TATGTTTTTG TTGTTGTTAT GTTGTIATNT TTATTTATAA  
AATGATAGAT CTGTGGGTAG GTTCTGAGAA ATGAATAGCT TGTATTTTCT TTTTATGAA AGAAGAACAA AATGAAGTTC  
AAGTGGAAG TATCTCCAGA AAGTTTAACT TTTTCTTATT AACCAACTCA TTGATTGGCA TGTGAAACTT GAGATATTTT  
ATATAGCACT TTTTAAATGA GGATCTAGCT TCACTINTATC ATACAACCAC ATTTAAAATA GCCAGGTCCA TGTCTATTAT  
AGGGG

SEQ ID NO:1656: (Length of Sequence = 285 Nucleotides)

GAGGNTTAAT AGAATAGATC AAAGCAGAAT GCAGTGTGTT CATGTCATAG GTTGACTTCT CCAGGAAACC GACCCCAAGT  
GGAAGGTTTA CATGCAGGTG GTTTATTAGA GAGTGATGTT GGAAGAACA CCTGTAAGGN AAGAAGGGAG CCTGGGAAGA  
GCAGNGGNAG AAGGTGAAC TGTATCACT TGCACAGAG TCCTAGGCTG AGTGCATGGG ATNCTGTAGA GTTGGGGATG  
GACCTTCAGA GATATTCCAA ATAGAGAAAG AATTCTCTGT TACTC

SEQ ID NO:1657: (Length of Sequence = 385 Nucleotides)

GACITGACTT TGCTTTTTTC CCCCCAAGTA GAACTAATGC TAGCTTCCAG CTTGAAAGTA AAACCTCCAGT GTGGAGTGAA  
TTTTGTGTCT AATTATAAAC CTGTAACCAA AACTCAGACA TCTGGTACTG GTCTTTGCAT TGAGATTGGT CCTGTATAAA  
CCCCCTTTAA AAGCATATTG CATTAGTAC AGAGCTCTTT TTTGAAATGN AGGCTGGAGA TGTGCATTTT TCACTGTGTT  
AACTGGTGT ATCTATTAG CAAGGAGATT GGGGTTTTG AGTGTTCG TGGTGGGT TCAAATTTGC CAGGGGAACC  
AGTGGCAGG CTGCTAGCAA GGCACTGAGG AAGCTCTTG CAGCCAAATG GGTGCATTT CAGGG

SEQ ID NO:1658: (Length of Sequence = 338 Nucleotides)

GATCAGGACC TCTTCTCTCT CCAACACTG CCCCAGAGC CCGTGTGTA ACGTTTACCA GCACACTACT GGGCTGTTTC  
TCTACCACTT GATTGAAATG ATCCTTATGG AAGCACAAT GACTTCACTG TCACTAAATC CAAGGGACAA TTTTGTGCT  
CTATTTTTCT TCACTCTCC AGGATGTTG AGAGCTGATC TTTCCCTCCC TCTTGAGCCT CCTCTCTGCT CTTGGCTTTA  
GGGGTCTCTG CTGACTTTTC TTCATTTCTA AACACATGTC CTCAGGGGT CCTCAGCCT GCAAGGCNA TGCCTGGGT  
ACCCAGTCTT GTGGGCT

SEQ ID NO:1659: (Length of Sequence = 346 Nucleotides)

AGTATGTGAA GTCAATCACT TTTTATATGC AGATAATATG CGACTTATAA TGAAGGTCA CGTTTCAATA GCAACAAAA  
AAGCTATAAG TAACAAAGAA TAACAAACT ATAAATGTAT AGGCTCTACA TAAAGAAAAC TATAATTCCA TAAAGGATCT  
AAAATAAAC GNGTAAATGG AAAGACAAGA TGTGTGTGA GATACGAAGA ATCCATGATT AAGTTAGAGG ATTCTTGGAT  
GACAGTAGAG TAGAAAGCAC CAAGAATGAG TCTGTATACC CAGAGAACAC TTACGCTGGT AGGAATCTAT CTCATACAAC  
TATTATGGAG CTCTCAAAGT ATACTG

SEQ ID NO:1660: (Length of Sequence = 240 Nucleotides)

GATAGAATAG CCAGCCTTCC ACTTGAATGC ACTGCCATAT TGTCAAGCTG CATTCCTTAA GCATCACTTC TTAGAGGCTT  
CAAGCTTCTC GGAATGTTT GATGACTTAA AGGGGAAATG AACAGGTTGC AATNATGCTT GTCAAGNTTC TTCTTGTGAA  
CCTCTATTTG GACAATTCAC ACAAAAAAG AAAGCAGCTC ATTTCTAAT TCAGGATATT ATTTCTTTTT AAAACTGGTA

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SEQ ID NO:1661: (Length of Sequence = 294 Nucleotides)

AGCACCTCCC CTGAGGGCCA GGCCTTGGAG AACCGGATGA AGCAGCTCTC CCTACAGTGC TCAAAGGGAA GAGATGGAAT  
 TATTGCTGAC ATAAAAATGG TGCAGATTGG CTGATTTCATC CTGGGCCCTG GCCGATATGC ATATCAACAT TTATACATGG  
 AACGTGAGA ACATTKTGCC AATAATCATT TAATATATGC CAAATCTTAC ACGKCTACTC TAAACTGCTC TAATGAAGTT  
 TCAGTGACCT TGAGGGCTAA AGATTNITCT TCTGGTGTA GAGCTCTTTG GGCT

SEQ ID NO:1662: (Length of Sequence = 291 Nucleotides)

GATTTTCATC AGGCAAATNA AAGTAACAC AGAAACAATT CAGTAATACT ACTAAGAGAG ATTAACCTCC CACTGGCCCT  
 GGAATAGCTA AGTGCAATGA TTTTGTGTGA GTTGAGAT TTTTCTCTC ATGTATATTT TAAGTATTKC TGGGGTAAAT  
 GTATTTTWA CATGCATGA ATGTGTAATG ATCAAGTCAG GGTATTTGGG GCCTCCATCA CCTTGAGTGT TTATCATTTT  
 TATGTGTGGT AACATTCCAA GCCCTCTCTT CTAGCTTTGG AATATATAGT G

SEQ ID NO:1663: (Length of Sequence = 345 Nucleotides)

GGCAGTGGGA CTCTCTGTGG ATAGACTGAT TCTTGTTTAG AAACAACAGC AAAAAGAAGA AGGCAGGAAA GAAACTCCCC  
 GGCTCGGAGG AATGTCTCTG TGATCCCCAT TCTTGATGGA GGGAGTGAAA AGGGGCCTGG NCITCGCCCG CTGCTCTCCT  
 GACAGAAACA GTAAGINACA CCAGGACAGA AGGCAGGAGC CCTGAGAACT CACGGCGCTC TGCATGGTCT CCAGCCNNNC  
 ACCCGTCTCC AGCCACCCCT GGAGCGGCCG TGGGGAGGCG GCAGAGGGGG CTTTTCGGAG GGCCCACTAT TNCACACGT  
 CTTTCTTTNG ACACCCAGAA AACTT

SEQ ID NO:1664: (Length of Sequence = 334 Nucleotides)

GTAAATAAGA AAGTGAAATA ATTCTATATA TGTAAGGTG ATAGAAGATA ATCATCAGGG TCAGAATTAA GAGGTCTTGT  
 GGTITAGGAA GCATAAAATT ATGTAACTTA TTGTTTATTT CACTCAGAAA ATAAAAGTAT TAATGAAAGG AGTTAGAGAT  
 GAACAGATTG ATACAAACTG TTCTATGGTT TACAGCTTAA AAAATAAAGG TACATTTAAT GCTATGCATT TTGAGAATAA  
 TGTCTTTTAT GCINTTCTT TTTACATATG TATCTNTTGG TATTTAAGGT CAAAATAGAT TGACATTACT AATTACTTCA  
 CTATTAATAA TTAA

SEQ ID NO:1665: (Length of Sequence = 310 Nucleotides)

TGTACTNCTA TGAAGCATCC CTTCACATC AGATCAAAGA CATCTTAAAG CCAGAAATAA TGGAGGAGAT TGTGATGGAA  
 ACACGCCAGA GGCTTTTGGG ACAGGAGGGA TAAGGAGGTG CTCCAGAAGC ACGGGACTNT GGACCTTGCA GGAGTGAGA  
 CTGTRATGTG TGGTCCCCAT ATGTGGCTCA GCAAAGACTC GAGAGATCAT CCTTTGTCT GCATTGACGG CCTGTGAGC  
 GCCTCCAGCC CACAGGCTG CTTTCTCTG TCCTAACACC AAGCCTGGGT GSCAGATGAA CAGTGCTTCC

SEQ ID NO:1666: (Length of Sequence = 352 Nucleotides)

TTTTTTTTTA CATACAAAGT TTGGATTTTT ATTGAAATCT TGTAGGTAT CAAACAAAT CTGCTTTCTT CAGATAAAAA  
 TATTCTCTCA GATGTCTCCA GATAACTGCT AAGTCTAAAT TGGTCCITCA ATGTCTTAT TTTATTGTCC TCGTGAAATG  
 TTCAATATACA GTTAAGATGT TCCCAAAGG ATTTTATCG TGTAAGGAG CGTACATGAC GACCTCTACC ACTGCCCTCA  
 CTAACAACT TTCTCTTGA GCCTCCACTG CCGCTATTTG CACTAGCCCA GGAAGGTCC AAGTCCCCCA CGACCTCTAG  
 AAGCACGGTT CCGAGGACT TTGGCGGTAA CC

SEQ ID NO:1667: (Length of Sequence = 287 Nucleotides)

GACAAATATG CCGCTGCCCA CATTTTGGTC CATCTTTTT TTTATATATG TTCTCTTCT TGGACTGGAT AGCCAGGGAT  
 GTTTCANCTT CTCGCTCGTC AAGTACGTAC CCTTGACCTA CAACAAAACA TACGTNTACC CCAACTGGGC CATTGGGCTG

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GGCTGGAGCC TGGCCCTTTN CTCATGCTC TTNGTCCCT TGGTCATCGT CATCCGGCCT CTGCCAGACT GAGGGGGCCG  
TTCTTTTG TG AGAGTCAAGT ACCTGCTGAC CCCAAGGGAA CCCAACC

SEQ ID NO:1668: (Length of Sequence = 300 Nucleotides)

CCAGACAAAT ACCAAGTTTA TTTCACAAAC ACTAGGAAGA TGGGTTGAGG GTGGAGGTGG GGGACACAGG TGCGCANTGC  
ACAGAGTCAG CAGCAGCAGC CTGNTCCCCG CACTGAGGAC TCGGCCTGGA CTGCAGTGCC TCCAAATCAA CACGCAGCAA  
GAGGGGAGTN CAGNGAGGGC CCTAACACC AAGCCTCTGA AAGGCTAAGG GACACAGCTC CATCTGTCCC AGGAAAACCA  
GCAATAAATA AAAGTNGGC ACGGCCCCAC CCACACATAT CATCTAGTCA CCCATCTTCA

SEQ ID NO:1669: (Length of Sequence = 334 Nucleotides)

TTTTAATGAC AGATTTTCCT AAAGAAACC ACTATAACAT CTGTCCAAGT ACTCCAGAGA AAACAAAAA TACATAAAGA  
TTAAAAGTCT ATTACTTTAA CAGCACATTG CCAACACCG ACHACTAGGA TAAATGCCAA GAAACCTTAA AAAATAACTT  
TAAAAGATGC AACGTTCAAG CCATTCAAAC GCGTAGGTTT CACAAACAAC AGGNNACAA GTUCAAGAGC AGTTCTACTT  
GTGCATGATG GTAACCTAGA CTGTACTTCA TCAAAGTTCA TTCAGGTGTT TCATAGGCGT CTGAGCAGAG TTTTGTITTT  
TCTTTTCCTT GCTT

SEQ ID NO:1670: (Length of Sequence = 287 Nucleotides)

GATAAAAGAG AAACAGCGAA GTTCAAGAG AAAAAGTTGA GGTCTTAATA ATNTTGGGC AACTTGACAG CAGAACAGGG  
TAAAANTGAG TTAGCTACAA AGGCTCATCA GAAATGGCA ATAGATTCCA GAGAGATTTA ATAAGTACTT ACAAAGTCTG  
CTATAGGTGA CAAATCTGAC CATGATAAAA GCACCGTAAA TGATATAGGT AACACTGNGC ATATGAAAAC TCAGACTGTG  
CACTAGATAA AAAGGAANCC CAGCATACAG TGTTACCACA TGTAAT

SEQ ID NO:1671: (Length of Sequence = 187 Nucleotides)

GATAAAAGAG AAACAGCGAA GTTCAAGAG AAAAAGTTGA GGTCTTAATA ATTTTKGGC AACTTGACAG CAGAACAGGG  
TAAAATWTRAG TTAGCTACAA AGGCTCATCA GAAATSGCA ATAGATTCCA GAGAGATTTA ATAAGTACTT ACAAAGTCTG  
CTATAGGGTG GACAAATCTG GCCCATG

SEQ ID NO:1672: (Length of Sequence = 329 Nucleotides)

ACATCACAAC ATCGTTTATT ATGTGAATTT TTACAAATAC AAACAAAAA TACAGAAATG CAATATATGA ATACAGCTAA  
ATGCAGAATG GTGACTTTTT TCTCTTCAAG AGGCCATGAT TCCATTCTT AGTAAATAA AGAGACTGCA TATAGGTAGA  
AACAGGTTGG TCATTAGCTT CACAATTTTG CCTAGAAATG ATCTATAAAT GCATTTCCCC CCTGCTACT TACCCTAAAG  
TGTAATAAGG GAGTTAAAGG AAAGTTTCCT TGTGTTCC TACCATATGA AAGATGCTAT ATTCTATTTT AGCAGTGCCA  
ATATATGGG

SEQ ID NO:1673: (Length of Sequence = 386 Nucleotides)

CTCCCTACTG TGATTCTCAT CAAGCTGGAA GCGTGTGAG AAAGCACTTC AGTTTCTTCC CTCGGATATG AACCTGAGCT  
CTCTGATGAG GTGGTTTAGA AGTGGCCCTG GGAGAAGCCC ACTTCTTGGT CACAAGATAC TGCAATCTCC TGGCAGATGA  
ACCAGCTGCT TCCAGCATCC TCTGTGTGGG TCCTCACGCC TAGCTGCTCT ACGTGTGTCG TCACAGTGG CATCATGCG  
GGAAGTAGAA AAACCTCTGA TGCCGTGCCC CACCGGGCTT AATCACAGTG AAGTCAGATT ATCTGGGNC GGGACCCTAC  
CATCATTTTT TTAAAGAAT TGCAGGGGCC AGGCGTGGC GGGCTTCAGA GCTTCTTAGC AATTTT

SEQ ID NO:1674: (Length of Sequence = 377 Nucleotides)

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CTGAAATTTG GCAAGAAGGG GCAAAAACGT GACTATTAAT GATTGATAAG CACCAGTGAA GAAGTTCTAA CTTTTCAGCAT  
 GCTGCACAGA AACTGGTATA ACATGCCCTC AGTATACTAA CACTCATATG CTCAGTTTTG TTTTGTTTTG GCAGTTGACA  
 AGAAGTTAAT TTGCTTTAGT AAAAATCCCT CATTCCAGCC TTTCTATATA AATAGCTCTT TCTTGCTGTT TTAATGTGGT  
 GCACACTATA GCTTCACAAA CCTGTTATTC CAGTGTAAATC TGCAGTGTG TAACTAAAGT TACTGGCTTG GGTCTTATTT  
 GCACAGTTTT TGCGNCTTGT TTGCTTCTTG CATCTGGATT AACTAGGAAT ATTCTC

SEQ ID NO:1675: (Length of Sequence = 381 Nucleotides)

CAGAAGTCAA TCAGCTACGC ACCCAGTTCT CAAAGACCTC ACATGCTAGG GAAGGTGCGG AGGCAGAGTT GTGGTTCAGA  
 AGCAGTTACA GGTCTCAAAG CAAGAACAGC AGCCAAAGCT TCCAGCCCT GACGCTGCT CTGAATGGTA AACCAATGGC  
 ATATGGTATC CACAGCTAGG CTTTGCTTTT TTCTGAGTGA AGGTAAAAGG CATTTGAAAA TAAACCAAAG TTTCACAGAC  
 TATGTTTATG GAACAAACAT GGGCCATTTT CAGGGATATA AAAGTCGATG TTCTATGTAG GCCCCATAT GAGTATTTAT  
 CTACTTTTTA TTTACTTTAT TTTATGGAAT TTATTGNC AAGGGCTTCA CTCGTTCGG A

SEQ ID NO:1675: (Length of Sequence = 404 Nucleotides)

CTGTGTTGAT TGCTTGAGCC CATCACAGTT TAGCTCTCAC AGCTTAAATT TACTAGCCCA TGAGAAGTCA GCTTCAAAGA  
 ACACCATTTT GACTCTCAA GAACATATC AATGTACATG GATAGCTTCC AACTTCATAA GGTGTTTCTC TCTACCTAGA  
 GCAATTAACA TTAATTTGCA GAATAGTGT TATTGAAAAC CTTTGTTGAT CTCCAACAAA GTAATAGTGT ATTGATTTC  
 TTCTACTAT CTTCACGT ATCATTAAAGA GGAATTTCTT AGGNAAGTCT ATATGCAGTA AGCAAGTAAG ATCGCAGAAC  
 ATCAAAGGEN GGAAGTAAAT CCCAAACTG GNTTTTACCT TCCTTCCCT TAGGTGAGG AAAGGAATTT ATGTTTTTAA  
 AGCT

SEQ ID NO:1677: (Length of Sequence = 388 Nucleotides)

ATGGACAAC ATGAGCCAGG AGCTACACA GAGAAGGTTT TGAAGCCAC TAAGCTGCTC TCCAACACAG TCATGCCAGG  
 TTTTACTGAG CAAGTAGAAG CAGCCGTGGA AGCCCTCAGC TCGGACCCCTG CCCAGCCCAT GGATGAGAAT GAGTTTATCG  
 ATGCTTCCCG CCTGGTATAT GATGGCATCC GGGACATCAG GAAAGCAGTG CTGATGATAA GGACCCCTGA GGAGTINGAT  
 GACTCTGACT TTGAGACAGA AGATTTTGAT GTCAGAAGCA GGACGAGCGT CCAGACAGAA GACGATCAAC TGATAGCTGG  
 CCCAGAGTTG CCCCAGGCGA TCATGGCTCA AGCTTCCCA GGGAGCAAAA AAGCCGGAAG ATTTTCGG

SEQ ID NO:1678: (Length of Sequence = 428 Nucleotides)

TAACTGTGCA AATAATCCAT GAATATATTG TTTTATACA GCATTACAGA TAAGGCTTGC AGCTCTATAG ATCACCTCA  
 TCCACTCCTT CACTCCATTG CTACACTTAA AAGCCTCACA TGCTCTCCTG TCCTCTCCAA AGGCAGCTGC TAGCATCAGC  
 GCCACAGTA GCCTTCTTTT GTTCCCTGTT TATAAACCAT ACATTTTCTA TGGCTACACA TACGTGTATT GTTTGATGCT  
 TTCTAATAAA ATTGTATCAT AGTGGTACAC ATCTTTCACA CTTTCCTNAT TACAGTCAAC ATTTGGNGGA ATACAGAATG  
 CAGCAGATCA AGGANCTTTT CTAGTCTTT TCTAACATGN CCCCAAATAC AGCCTCACTA TGGGGTCCAT TTAGNGGCT  
 CATTTGTTTT CACTCTCACA ACGGTGGC

SEQ ID NO:1679: (Length of Sequence = 256 Nucleotides)

GGTGTCCACA GCCTGCTGCC TGGCTGGAG CAAATACCTT TGTTAAGTGC TCAGAGGGTA TGGCCCTCA AATCCACCTT  
 GCAGCTCCCT GGCTGCAAAT AACTCACTC CATCTTTTCA ACTCGCTCCC TGGACCCCTG GTTAACACTT CACTGTAACT  
 CCTCAGTTGT ACAAAGCATT TTCATTTGAA TACAAAAGGC AACTNGNCAC CANATGGGCA TCCTTGAGCC ATGGTAAACA  
 CTGAATTNA GGCTCA

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SEQ ID NO:1680: (Length of Sequence = 438 Nucleotides)

TACCACTAGT TCCTTTCCCG CTTTATTTT TAGCTGCTTT TTGGGTTTTA TACAATGAAC ATGTATTAAT TGTAGAAGAA  
 AACGATGTCA TCCTTTATGA TAAATCCAT TTCCATTTTA GCTTTTTTAA AAAACAAAA AGCTGTGTG GACAGATGAA  
 CATCCAAGTA CTGGGCACAC CTCAGCCCT CCTCTTCCA CTGAAGGCCA TTGCCTATTC CTAGAAAGTT CTTTCCAGG  
 TATGCAGCTT TCAGTTTCCA CTTACAGGC CACAGTGTCT GGGGGAACGG ACTGCCCCCA ATACTAAAGG GAGTCAAAT  
 CTCCTTAATT NCCGCACTTC CTCAGTACCA ACAAGGAAGT CCTTCTTTA GGGCCACTGG ATGGGAACCT NGGGACCCCC  
 CTTTTTGTAT TGGCAAGCAT TGGGNTCCT AGGGCCTT

SEQ ID NO:1681: (Length of Sequence = 370 Nucleotides)

GTCTGGGAAG GGTACAATGT CGTCCGCGCC TGAGGGCCA TGATTGGACA CACCGACTCG GCTGAGGCTG CCCAGGAAC  
 CATAAGGGT GACTTCAGC TCCACATCAG CAGGAATGTC ATCCACGCCA GCACTCCGT GGAGGGGGCC CAGCGGAGA  
 TCCAGCTGTG GTCCAGAGC AGTGAGCTGG TGAGCTGGG AGACGGGGC CAGCAGCA GCATCCACC AGCCTGAGGC  
 TCAAGCTGCC CTTACCACC CATCCCCAC GCAGGACCA CTACCTCCGT NAGCAAGAAC CCAAGCCAC ATTNCAACC  
 TTGCTTGTC CAAACCACTT ACTTCCCTGT TNACTTTTG CCCANCCCA

SEQ ID NO:1682: (Length of Sequence = 397 Nucleotides)

ATGTAATCCG CTGCACCAA CACACCTCA CCAACCACAT GGTTTTAAAG TTTGACTGCA CAAACACACT CAATGACCAG  
 ACCTTGAGAG ATGTNACAGT GCAGATGGAG CCCACTGAGG CCTATNAGGT GCTCTGTAC GTGCCTGCC GGAGCCTGCC  
 CTACAACCAG CCCGGGACCT GCTACACACT GGTGGCACTG CCCAAAGAAG ACCCCACAGC TGTGGCCTGC ACATTGAGCT  
 GCATGATGAA GTTCACTGTC AAGGACTGTG ATCCACCAC TGGGGAGACT GATGACGGAG GCTATGAGGA TGAGTATGTN  
 CTGGGAAGAT CTGGGAAGTT TACTTGTAGC TTGTTACAT TCCAAAGGT TCATGGAAAC TGAACCTCGA GCAGCCT

SEQ ID NO:1683: (Length of Sequence = 396 Nucleotides)

GGCTGCGCAG AGGAGCCGCT CTCGCCCG CCACCTCGGC TGGGAGCCCA CGAGGCTGCC GCATCCTGCC CTCGGAACAA  
 TGGGACTCGG CGCGCAGGT GCTTGGGCG CGCTGCTCT GGGGACGCTG CAGGTGCTAG CGCTGCTGGG GGCGGCCAT  
 GAAAGCGCAN CATGGCGCA TCTGCAACA TAGAGAATTC TGGGCTTCCA CACAACCTCA GTGCTAACTC AACAGAGACT  
 CTCACCATG TGCTTCTGA CCATACAAAT GAACTTCCA ACAGTACTNT NAAACCACCA ACTTCANGTT GCCTCAGACT  
 CCAAGTNATA CAAACGGTCA CCACATGGN AAACCTTACA AGCGGGCATT TTAATTNCA ACANCAACCA GGGGAT

SEQ ID NO:1684: (Length of Sequence = 417 Nucleotides)

ATCCAGGGGA GATGCATGTG GAAATGTGGT CCTCTGGGT CAGACCCCTG CAGGGACAT CTGCTTTN AGTGTGAGA  
 GTACATGGGG AAGGGGCTGG GGGCACCCT GTGTACCTGG GCCAGTAAG GCATTTGCCG TGATTCCAC AACGGGTCA  
 AAAGCTGGCC TTCAGGGTGA CCTAACACCA CCTCATGCC TGCTATAGAC CTTACAAAC GACTTCCACT GCTGAAGCCT  
 GTAGGCTCTG TTTAGAGACA AGAAGATGGC TGTTAATTTA AGCACCGATT TCCCAAGTGC CCACTCTCCT TTGTGCTCTG  
 TTGGCTTTTG GCCTAAAGCT TNCCAGAG TTAGGGTGA GGATGTCTGT GGTCTGTGAG ATGCCTTTCC CTTCCCCCT  
 CTGCTTCAAC CGTGGTT

SEQ ID NO:1685: (Length of Sequence = 429 Nucleotides)

GAGCCATGGA GAACTCTGAA AGGAAGAATC GCTGCTTNC TCAAGCAAAT CGTTTCTTG ATGTCTTTTG GTTCTCCTTG  
 CCTGCNCTG ATGCTTGGNC CCTTTAATT GATCAGAGT CTCTAGAATA ATGGATGGTC TTGGATGATG GATAAATAGG  
 GACAGGGACA GTTAAATTGG GAGCCTTTCT TACAACCTTN ATGGGATTIT CCCCCCAAG TTCTCTCTC CACTGAAATG  
 CCACACTAAT GCTTGTGGG ATTCATGAGG TGGCCAGACC AATGTGTTGT TTGTGTGTG TTTTTTTTT AAGCTTCCCT



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TGAGAGAATA AATGGGTAAT GGGAGGAGAA CTATTTTAAC AAGGGTCTCG GGTTCCTCTT TGCAACACA GTAGGCTTAA  
ACTTTGCCTG CTTTTTAAAA TGGCATTMT

SEQ ID NO:1686: (Length of Sequence = 445 Nucleotides)

TGTCCTCATA ATATAACAAC ACTAATACAC TAATAGTAAG ATTAAGTTAG GCAGTCTTCT ACCAAATGTG TAATGGAGAT  
TGCTCAAAA TTGTGTCCAC ATAATCCACG CTCATCTTGC AAAGCGCTAT TTCAGGCACT TTTTTTTGAG AAAGAGTCTC  
ATTCTGTGCG CCAGGCTGGA GTGCAGTGGC GCAATCTTGG CTCACAGTAA CCTCTGCCTC CCGGGTTCAA GCGATTCCCC  
CGCCTCAGCC TCCCGACTAG CTGGGACCAC AGGCACGNAC CACCACGNOC GGCTCACCTT TGTATTTTAA AGTAGAGATG  
GGGGCCTCAC CATATTTGGT CAGGCTGGGT CTTCAATCTN CCTGGACCTC ATGNTCCACC CGCCTTGGGC CTNCCAAAAG  
TGCTTGGGGA TTANAGGGAA TNGGCCACC GGGGCTTGGG CCAAT

SEQ ID NO:1687: (Length of Sequence = 170 Nucleotides)

AAAAACCAAA TAAAGCAATA ACTTTAAAGA CCTCAGACAC ACACAGTATA AACACCTGGG TAAGGTTTIN TCCGTGTCCA  
TGTTGACACC GGAAGTACCG TTAAAGTGCA AGTTTGTGTT TGTTTCCTT TGTCAGTTT CACTCATATG TAAACAAGTC  
ACTTGGCTAT

SEQ ID NO:1688: (Length of Sequence = 386 Nucleotides)

AATGTGATTT GATGTTAACA CTAGAGAATG ATGACTGTAG AACATTTGAG CAAGTAAAAT AGTAAAGCAC ATAGTGAGTG  
TATGTCCATC TAACTGGTAC ATTGATAATT TAGTTTGGGC ACATAAAAGG AATATTTTATA TGGCTTCCCA AATGCAGAGT  
TACATCTTAT TCGTGTATTT CTCGTAGTAT TTATATCCCG TCCTCTTTT TCATTCTTAA AAATAAATGA ATTTTCACTG  
TTGGCACATA TGAGGCTTAA ATATAAGGAG CATAACACTT GCATTCTAAT TTTTGCAATAT ATTGTAAATG TGTCTGGTAT  
TTACAGCAAA ATAAGTGTA TCCTTATG GATAACAAAG TGACATTGCA TGCATGTAAT GTGATG

SEQ ID NO:1689: (Length of Sequence = 400 Nucleotides)

CTCTGTGCG ATCAGCGTAT TCCTAGATTG GGAATTCAAA TTAATGAAA TTACATATG AAAGGAAAAT CCATTGCTAT  
TTCTGGAGAG GACCTCAGTC CTGGCTTTT CCGTGGCATT GCTACCTGGG TGGGTGCTCA CCACTCAGGT GCTGTGTG  
GAAGGCAGGA GGAGGAACCT GAAATCCTGC CGATTAAAGG TAATTAACAG GGTTTAGGTG CCTAATTATC ATGACTCAGC  
CCGGACTTGA TGGTTAGCCG TGCAGGCCAG GTGAGTCTCT TATGGACTTC CTCTCAGACT GCTCTTCTC ATTTTGTCTT  
GATGAGATAT TGACAGTCAT GTCCACCGC TTCTCATCC ATTTCCCGTC TTGGGGCCCT GGAAGTACG GGGGCTCTG

SEQ ID NO:1690: (Length of Sequence = 337 Nucleotides)

AGTATATAC CTTTAAAAGT AACTAATGCA ACTGCCAAN AGGGACAGTG TCAATATCAT TGINTTCATT AGAAGGACGG  
CTGCCCCACA CTGTNAGAAC ACTGCTGTTC CTAACAGTAG TTAATTINA GAGGGATGTA AGAATTAGTT TNACCTAAT  
TCCAGATGTC CATGCCCAA AAGAAAAATC CCATTCTCTT TCCTTTTGGG GAGCACTTTT GGTGGCACCA AGGCTGGTGT  
GGGGTAGTGG AGAGAGCACT GAGCTTAGAG TCACAACCAG ATGAAACTGC TCTGGTCTTC ACTAGCTGTG TGACTTGGGC  
AAGCAGCTTG CAGTCTC

SEQ ID NO:1691: (Length of Sequence = 372 Nucleotides)

TCATTCTCCC AAAGTGCTGG GATTATAGGC GTGAGCAGT GCGCCAGCC TTAATTATT TTAAATCAGA TTTTAAATC  
AACTAAACA GCTATGAGTT AAGTACCTGC CCTGCAAAA TTTTAGAAA AAGTTTTAGG ATTATGAAAT TAAGATTAT  
TTTCTTAAC TGGAACAGTT CTAAATTTA TCTGATACTT CTCTAACAAG TGAGTGATCT CATGTAACCC CAGTTTGTAT

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CTTAAAGGCT GCAGCATAGA ATTGAGCTGT ATAACAGTGT TAGAACTGTC AAGTGATAAT CACAGAACAG TTTGTATCGG  
TTTTATAATT CTCATGTCCT GATCAGATCT GAAGGAATA GGCATACCCT CC

SEQ ID NO:1692: (Length of Sequence = 360 Nucleotides)

TTTTTTTGGC AAAAATAGTA TATATTATT ATGTACAACA TGTATTTTGA GATATGTATA CATTGTGGAA TGTCTAAATT  
GAGCTAACAA ATACATTATC TCACATACCA TGTTTTTTTG TGGTGACAAC ATTCAACAAT ATAGACCATT TCACAAATTT  
GCATGTTATC TTTGTGCAGG GGCTATGCCA ATCTTCTCTG TATTTTINCA ATCTTGGTGT ATGTGCTGCT GAAGCACACA  
CCCTAATTCC TTTCATTAA GGTCTAGTT AACCTTCTC TTAAGTATAA CCATGTATTT TGTTAAGCAA TATCTTTTTA  
TTACAAAAT GCCATTTTTT TCTGNTAGG AAAATTGATT

SEQ ID NO:1693: (Length of Sequence = 378 Nucleotides)

GACAAAAAGA GGGGCTGGC TGCCGATGTG GAAATTTGTT TTGTGGACTT CACCGTTACT CTGACAAGCA CAACTGTCCG  
TATGATTACA AAGCAGAAGC TGCAGCAAAA ATCAGAAAAG AGAATCCAGT TGTGTGGCT GAAAAAATTC AGAGAATATA  
AATTACTTCT TGTGAAGAGA CTGAACTTT GTTTTATTT TAATATATCG TAGGAAAACA TTAAAGAGCA GATGCATGSC  
CATTTTNCIT TGATGTCTC CAGAGTTTAA CATTACACT GTCTGTCTTA TAATTGATAT TTTAGGGATG TTTGGGTGTT  
TGTTACAGGC AGAATTGGAT AGATACAGCC CTACAAATGT ATATGCCCTC CCTGAAA

SEQ ID NO:1694: (Length of Sequence = 362 Nucleotides)

AATGCACITTT ATTGGCTCCC AGGGAGTGGG ATGCAGGATC AGAGTGGACA CGCGCAGGGG GCTGGTGTGG GGAGCAAAGC  
NCGGGCCCTG CCCCAGACCC TGGTTCCCT GAGGACCAAC GTGAATGGGG GCCCCTGAG AAAGATGCTT GGGGCTGAG  
AGCGGATGGA ATGCAGGCC AGGTGCTGG GTGGTGCCCT CAGCTCCTGG CAGGGTTGAC GGGTGGTGGC CGCTGGGCTC  
TGCCAGCCGA TGGTCNCTG GCACCTGATC CTGTCTTCCA GCTTCACTTC CGGGCCTGCT CGTAGTTGTC AGTGAACCAA  
GCACAGGTCT CCTTGACCGN CTGCTTTNAA GGGTGTGAAN CG

SEQ ID NO:1695: (Length of Sequence = 411 Nucleotides)

TTAATACAAG GGGTTGAAC TGGACATCCT AATGATGCAA TTACGTCATC ACCCAGCTGA TTCCGGGTGG TTGGCAAAT  
CATCGTGTCT GTCCGAGAG GCTCCACAAT GCCACCCGC ATGCCATTTC TGTAGTCTTC AGGGTCAGCT GTTGATAAAG  
GGGCGGCTT GCGTTATTGG CCTAGATTTT GCTGCAGATT AAATCCTTGG AGGATTCTCT TCTCTTTTAC CATTTTNCIT  
CGTGTCTCA CTCTCTCTT CTCTCTCTAG CTTTTTAATT CATGAATATT TTGTTGCTG TCTCTCTCTC TCTCTGTGT  
TCCTCCAGCC CTGTCTCGG AGACGGTGT TTCTCCCTT GCCATTATC TTTTCACTC CCAGGGCTAC CCATTTCAAT  
GGTGGGTGCT T

SEQ ID NO:1696: (Length of Sequence = 280 Nucleotides)

CTTTGTGATG TTTTACGCT TTACAAAAG CAGATTTGGT ATTCAGAAAA GCCTGCAAAT ACAACATTGC TTAAGAGAAC  
CTGTAAACAC GTTTGAATA CAATGCAACA CAAGTCAGCA AGGACAGGGG TAGGTCCAAA GGAGCCAGCT AGGGGGAAAG  
GTGACAGAAA AGGAGAGGGA AGGATGNGA CAGACATCAC CTGTGCTCTC TAAGGGGGCC NTGTGTTTAA TTTATAAGGT  
TTNCTNCCCA CAGGAGTTCT NNTGTGATCT ATCCGTTTCA

SEQ ID NO:1697: (Length of Sequence = 418 Nucleotides)

ATTTCTTCAT TTACAAGAGG AATATATTG GCCTCTCTCT TAAGACTCTG AGATTCAACA TCAGCAGCTC TAAAAAATAA  
AGGAGCAGTT TGGCTCCGG AAGGAAGAGG AGGCAACACT CGGACCTGGT TCTTGATACA CAAGAAAACA TCGCTGGGGC  
CCCGCTGAGG CTGGAGTGGG GGTGGAGGCT GGTCTTTTGA GGATGCCACC CCCACCCCAT CCTCTGTCA GGCCCTCGGG

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GTACCCAGAG GCTTNGTGGG TGAGTATTCC ACCTGCTTAC ACACCACTGA AGCCACAGCC AGCCAGTAAC TAAGGGGCAA  
GAAAGAGCAT TGTCCAAGCT GGCTCTTNG GGGGGTCCCC CATNGGCCA CAAAGGCCTC ACCCCCCACC CCATCCCCGT  
AACCAGAAAC CACCTTGA

SEQ ID NO:1698: (Length of Sequence = 376 Nucleotides)

ATTTTATATG TTTATTTACT TATTTTTTAC CCTTTTTTCA AGAGATGGGG TCTCACAGTG TTGCCCAGGC TGGACTTGAA  
CTCCCACTCC TGGGCTCCAG CAGTCTCCT GCCTCACCTT TCCAAGTAGC TGGGGCTATA AGTACACACC ACCATGCCCC  
GCAATATTTT AATTTCGTGA ATGTGTCATT TAGCCAGTGA TTGTTGTATT ATAATAGAAT CACAGAAATG GAGGGACTCC  
TAGAGGTAAAT CAAATCTGGT GGTTTTAAG CCTTTTATTC CCTCTAAAGG GATAGTAAAA CCATTAAAAA TATAATTTTT  
CCCAATTATG TAAGCCAGRG AAAGCTGACC TYCTGGTTTA GAGAGGAACA CAGATG

SEQ ID NO:1699: (Length of Sequence = 365 Nucleotides)

GGTACATGIG CACAACGNG GNGTTTGTTA CATATGTATA CATATGCCAT GTTAGTGTC TGCACCCATT AACTGTTCAT  
TTAGCATTAG GTATATCTCC TAATGCTATC CCTCTCCCT CCCCCCTACG CACAACAGTC CCTGGTGTGT GATGTTCCCC  
TTCTGTGTC CATGIGTCT CATATTCAA TCCCCACCTA CGAGTGAGAA CATGCTGTGT TTGGTTTTTT GTCTTGCGA  
TAGCCAGATG CAGCTACTCT TAATGTGCAT ATTTTCATCC TAGAACATTG GAGAGTCTCT GTAAAAGCCT TGTGTTCCAG  
GAGGAAGGAG ATCTGACCC TTCTGCTGAT GGCAGCAGTC AGGGG

SEQ ID NO:1700: (Length of Sequence = 397 Nucleotides)

AAAGGCAGTC AAGCAGGAGT TAAACAATAT GGACCTAAT CTCTTATAT GAGAACATTA TTAAATTCCA TTGCTCATGG  
AAATAGACTT ATTTCTTATG ATTGGGAAAT TCTGGCTAAA TCTTCCCTTT CACCTCTCA GTATCTCCAG TTAAACCT  
GGTGGATTGA TGGGGTACAA GAACAGGTAC GAAAAAATCA GGCTACTAAT CCTGTGCTT ATATAGATGA AGACCAATTG  
CTAGGAAGAG GTCCAAACTG GGACACTATT AACCAACAAT CAGTAATGAA AATGAGGCTA TTGAACAACT ATAAGGCTA  
TTTGCTCAG GGGCCTGGGA AAACATTCAG GACCCAGGGA ACCTCATGCC CTCTTTTATG GTTCAATCAG ACAAGCT

SEQ ID NO:1701: (Length of Sequence = 245 Nucleotides)

GTCTAGGAGG AGGCCTTCTG CACAGAGCCC CTGAAGAACA CAGGCAGAGG CCCCCACTT GGCTTCTACC ACGTCCAGCA  
CATGCGAGTG GAGGTGACCA AGTCTTCAT TGAGTACATC AAGAGCCAGC CCATTGTTTT CNAGGTCTTT GGCCACTACC  
AGCAGCACCC GTTCCGNCCT CTCTGCAAGG ACGTGCTCAG CCCCCNAGG CCTCGCGCC GTCATTCCC TCGGGTCATG  
CCACT

SEQ ID NO:1702: (Length of Sequence = 349 Nucleotides)

ATCTGTGTC AGCAGATTT TATTGCTGT GGAATCCATG AGAGCCGGAA GCATCGTTGG GGCCGTGGCT AGCAGAGCTC  
ATGGTGACCA GTCCTGGGCC TGACCAATGG GTGATTACAT TAAAAACCA AAACAAAACA AAACAAAATA CCAAGAACAG  
ATCACTTGCC ATGGACATCA GAAATCTATT GGTAAATGGT AAAATTTTAT GAAAATTTCC CCTAAACCAT AACAAAACT  
GTCCTCTTA CCCCAAAAGT GCTGGAGGGA AAGATGGTGT CATGGCTTTG ACCTCTCTTT GAACCTGAAA TGCTACCTTC  
CTACCCGGAA AATGCGGCAC ACTATACTT

SEQ ID NO:1703: (Length of Sequence = 419 Nucleotides)

GAGCCCCGTC CCTCCAGAAG CTCACATCCT CCTACTCATG CGAGACAAAT AAACGTGAAT TACACTGCAG GGAGGTAAGT  
GTGGCAGCAG ATGTAGTATG CAGTGCAGAG GTGGCCATGG TTGCNAGGGC AAGGAGGGCT TCCTAGCATG GGCGTTATTT  
GACCAGAGGC TGGCGGTGGC TTTTGCTAGC AGTGTGATTG TNACTGAGC CAGGGACAGA TACCTCTNTG AGCCTTGTT

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TCCTCATCTG TAAAGTGGTT AAAGACTGAN TAAAGCAAAA TATGTGCAAA CAGTCTGTGA ATGGGGAAST AACASATGTT  
GCTTTCTATT ATGTTCTCTC CTAGCCATGA ATATCAATTA TTTCAGAAAT GAAAAGGGAT CCTGCACCCA ATTTCAAATC  
AAGCAAGTTC ACCTAGAGG

SEQ ID NO:1704: (Length of Sequence = 372 Nucleotides)

GCTTCCCGAA GGTCTTGGAC GAGCGCTCTA GCTCTGTGGG AAGGTTTGG GCTCTCTGGC TCGGATTTTG CAATTCTCC  
CTGGGGACTG CCGTGGAGCC GCATCCACTG TGGATTATAA TTGCAACATG ACGCTGGAAG AGCTCGTGGC GTGCGACAAC  
GCGGCGCAGA AGATGCAGAC GGTGACCGCC GCGGTGGAGG AGCTTTTGGT GGCCGCTCAG CGCCAGGNTC GCCTCACAGT  
GGGGGTGTAC GAGTCGCCCA AGTTGATGAA TGTGGACCCA GACAGCGTGG TCCTCTGCCT CTTGCCCAIT AACGAGGAGG  
AGGAGGATGA CATCGCCCTG CAAATCCACT TCAACGTTCA TCCAGTCTT TC

SEQ ID NO:1705: (Length of Sequence = 426 Nucleotides)

GATGCCITAT TTAGTCCATT TGGTGAGGTA ATGTTTCTT GGATGTCCCTT GATGCTGTGA GACATTTGTT GATACCTGGG  
CATTAAAGNG TTAGGTATTT ATTCCAGTCT TCACAGTATA GGCTTGTITT TAGCCATCCT TTTTGAGAGG ACTTTCCAAG  
AATTCAAAAG GGATTGAGTG TTGTGACCTA AGCCTATGGT CACTGCAGCC ATTTTCAGCAC TAGAGAGTGC CCTAAGCCCC  
GGAATGCTGC AACTCTTACA GACTCCTTGA TACACAGCTT TGGTAGATTT TGGGAAAATA AGGGAGAATT CCCTGGGGTT  
ACCAGGTAAA AAGTCTCTCC CACTTCCTTC TCTTCTGGC AAAGGAAGTC AGTCTCTGCA CCAGGCTGCC TGGAGTTTGG  
GGGAGGGATA AGGCGGTCAC TCTAAT

SEQ ID NO:1706: (Length of Sequence = 412 Nucleotides)

ATTTTATTTT CTTACATCGA AGAAAATGTT AAAGAGTATC TNCAGACACA TTGGGAAGAA GAGGAGTGCC AGCAGGATGT  
CAGTCTTTTG AGGAAACAGG CTGAAGAGGA CGCCACCTG GATGGGGCTG TTCTATCCC TGCAGCATCT GGGAAATGGAG  
TGGATGATCT GCAACAGATG ATCCAGGCCG TGGTAGATAA TGTGTGCTGG CAGATGTCCC TGGTTCGAAA GACCACTGCA  
CTCAAACAGC TGCAGGGCCA CATGTGGAGG GCGGCATTCA CAGCTGGGCG CATGAAAGCA GAGTCTTTTG CAGATGTAGT  
TCCAGCAGTC AGGAAGTGGA GAGAGGCCCG AATNAAGGTG TACATCTATT CCTCAGGGAG TGTGAGGCA CAGAACTGT  
TATTCGGGCA TT

SEQ ID NO:1707: (Length of Sequence = 434 Nucleotides)

GTGTGTCTGC AAAAAAAAAA AAGATTCTAG GCATGGTGGT GTGTGACTG TAGTTCCAGC TACTCCAGAG GCTGAGGTGG  
GAGGATTGGT TGAGCCTGGG TGGATGAGGC TGCAGTGACC CATGATCATG CATGGGAGAC AGAGCAAGAC CTTGTCTCAA  
GAAAGGAAAG AAATCACTGG CTCTTCTGTA AAAAAATGATC TGTTAAGAGT AATTGAAAAA ATAAATACAA GTAATAAAAT  
AATCTTTTCA TTAAGAAATA CTACCAAAT TAACATGGAG ATCTAGCAAA AAGTCAAAG CAGCTNGGCG TGGTGGCTCA  
CACCTGTAAT CCTACACCT TGGGGAGGCT GAGGCGGGAG GNTCGCTGA GGTGAGGAGT TCGAGACCAG CCTGGCCAAC  
AGAGCCAAGT CTCTACTTAA ATACAGATTA GCTT

SEQ ID NO:1708: (Length of Sequence = 440 Nucleotides)

GGACCAGSAC TCCAGCACCT TCCCTGGCTG CATCAACAAT GCCACACTCT TTCAAGATGA GATAAACTGG CGCCTCAAGG  
AGGGACTGGT GGAAGGCGAG GATTATGTGC TGCTCCAGC AGGTGCTTGG CATTACCTGG TCAGCTGGTA TGGTCTAGAG  
CATGGCCAGC CACCCATTGA ACGCAAGGTC ATAGAGCTGC CCAACATCCA GAAGGTGAA GTGTACCCAG TAGAACTGCT  
GCTTGTCCGG CACAATGATT TGGGCAAATC TCACACTGTT CAGTTCAGCC ATACCGATTG TATTGGCCTA GTATTGCGCA  
CAGCTCGGGA GCGGTTTCTG GTGGAGCCCC AGGANGACAC TCGGCTTTGG GCCAAGAACT CAGAAGGCTC TTTGGATAGG  
TTCGTATGAC ACACACATCA CGGTTCTCGA TGCGGCCCTT

SEQ ID NO:1709: (Length of Sequence = 404 Nucleotides)

TTTGCTTAT GTAGAATTGC CTATAGTAAG AAAACCCAGT AGAGAAAGTG GTTTTNAGAC CATTCCGGCAG CTGCTTTGGA  
CACCTGGAGC CATTCTTTT ACAGATGAAG ATGCATTGTG TCATTGTCTC AGGATCCTCG TCCTGTTGCT TCTCTGGCCA  
CAAATTGTTT TTACCAAAG ATGATTTTAT TTCACGTCTT TIGAAAATCA TTCTTTATAG GTAGAATATG AAGATTCTCT  
GAAATGATTG CAAAATGCCA AACTCAAACA CTATTGTCCG ATTTCTTTAC TTGCAACAAG AGAGTAGAAG GGACAGTATT  
TGTTTGTGA TGTGGGGGCG TTCATCAGGG AGAGAATTTG AGATAAGTAG GAATAGCAAA TAGGAATAGT GAAATAACCT  
AGAT

SEQ ID NO:1710: (Length of Sequence = 187 Nucleotides)

GGTGATCTGC CGACCAGAGG CCTTAACTC TGGTGTGAG TACTACTGGG ACCAGCTGAA CGAGACGGTC TTCACGTCTC  
ATTCCAACAG CAGGAGCAGC GAGCGSCTGG ACCAGGCAGA GCACATGGAG GACAGCAGAG ACATGGGCTG ATGAATGCAT  
TGGGCCTCAG CCGACCTGCA CTCAGTG

SEQ ID NO:1711: (Length of Sequence = 313 Nucleotides)

AGGGGCATGT NATCATTINA ATGATGINAT CTTTGGTGT TCCCTCATTG GCTGTAGACT ATCCCTCTC CTCCCACCAC  
AATGTTTCTA TGATGAGTTA CAAACAGAAA GGAAATCACA TTTTCATACT AAAAACAAAA TGATCAGAGC CTTGATTTCT  
CCACTAGAAA CTACACGTAC AGTTAAGAGT CCACATGCAA CACCTTAAAT CACAGACTGA GGACCTCACA TTCTGACCTG  
GGAGTCTCCT CCCCTTCCCC AGCCTTGGGC TAGCTTTGGC CTAGGCTCAG GTAATACTGA CACCCACAGG CGT

SEQ ID NO:1712: (Length of Sequence = 202 Nucleotides)

TTTTGGTGGT TTCTCTTTA TTGTGTGCTT CCTACCTTCC CCCACAATTT CAGTCCCTTC CAACACCCCA AAAAGAAGGA  
GTGAAAGGAA GGGATTGCTG GGGTTCTGAG CCCTTGGCAG TCAGAAGGAC AGAACCAAAC ATCACTGGAT GTGACACAGC  
TGCATCAAGA AGTCTACAGC AGTATGGGAA GCGGCAGAGA AG

SEQ ID NO:1713: (Length of Sequence = 253 Nucleotides)

TGATTCANTG GGTCTGGGAT AGAGTCTGGT ATTCTGCATT TCTGACTAGC CTCCAGGTGA TACTGATTCT CCTCATCTAG  
GGACCTCGCT TTGAGTAGCA AGTGTTTAGG CCACTTACTA GCAGGAAC TAAGCAGTAT CCTACAACAG CAAATGCTCT  
TCCAACAAGA AAGACGAGAG CAAATNCTGA TGCCACATCT GCACTGCCTC AGAAAATAAA GAAGGGATGA GGAGCCCCC  
AGTGGCACTC TGT

SEQ ID NO:1714: (Length of Sequence = 299 Nucleotides)

GGTGCAGCTG CTTTGAAAAA TGACTTGGCA GCACCTCAA ATGTAAACA GAGTTACCAC ATGACCCAGT AATTTACAC  
TTAAGGATAT ACTCAAGAGA AATGAAACT AAAACATAC GGCTACCCAA AACTTTACAT AAGANTGTTT ACAGCAACAT  
TATTATAAT AACCAAAATA TGGNAACAAC CACAATGTCC ATCAATTGAT AAMTGGGTAA AGTCTGGCAA ACTCACAGRA  
TGGRATATTA TTTGGTGGTA AAAAGGAGTA AAGAACTSN ATGTACTACA ACATGGGTG

SEQ ID NO:1715: (Length of Sequence = 371 Nucleotides)

TTTTTTTTTAC CGGGGCGTTC CTGAGTTTAT TTGGGGCACA CCGGACGAG GGCCCTGCAC CTAGAAGAAG GTGTTGGGCC  
TCTTGGTGGT GAAGCGTGGC TTGTGCTGAC GCGCGAGGAC CCGTGGGGC AGCGGGAAT TGATCTTGA GTGCTGGAAC  
TGCTTGACAG CCGGCCGGCG GCACTTGCTG GCGCGATCT CCTCCACCTT CATGATCTGA ATGGAGTGGG CTCGGGCGCG

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GTGCGGGGCA CCCATGTCTC GGTAGCACTG GGTGACAGCG CCTGCGGTGG TCAAGTCCCG GTATTCCCGG TACATGTTGT  
GGGTGCCGCT CCGGGAGTCA TAGCGCAGCA AGATCCCGAA GTTCTTCAAC C

SEQ ID NO:1716: (Length of Sequence = 265 Nucleotides)

GTGCAGAATC TGCTCCTGGA CACCCACAGG GGGCTGCTGT ATGCGGCCTC ANANTCGGGC GTAGTCCAGG NGCCCATGGC  
CAACTGCAGC CTGTACAGGA GCTGTGGGGA CTGCCTCTC GCCCGGAACC CCTACTGTGC TTKGAGGGC TCCAGCTGCA  
AGCACGTCAG CCTCTACCAG CCTCAGCTTG CCACCAGGGC GTGGATCCAG GACATTGAGG GAGCCAGCGN CAAGGACCTT  
TNCAGCGCGT CTTGCGTTGT TTCCC

SEQ ID NO:1717: (Length of Sequence = 350 Nucleotides)

CAGCCCCCGC AGCCCTCTGG CCCCCTCCAT CTCTTGTCGG TTCCCACCCA CCCCCTCTCT CGGCCCGAGC CTTTTCOCGG  
TGGGTGTGAG GNTCACTCCC ACTAGGGACT CTGCGCTAAT TACCTGAGCG ACCAGGACTA CATTTCOCOA GAGGCTCTGC  
TCCAGGAGTC CAGGAAGAC GAGGCACCTT GGCCGCGGGG CCTGCTGGGA CTTGTAGTTG CCTAGACAGG GCACCACCTT  
GCACTTCCGG ACCCGCGCTG GAGGCGCGGT GAGGTTTGGT GTCTCGAAGC AGCAATTAAA AAGCAAGAGG ACTTCATGAC  
CACCATGGAC GSCAATTAGG AGAAGATCAA

SEQ ID NO:1718: (Length of Sequence = 379 Nucleotides)

GACATGGAGA CTCACATGCC TGCAGAACAC TGTCAGGTGA CCTGCAAATG TAACAAGAAG TTGGAGAAGA GGCTGTTAAA  
GAAGCATGAG GAGACTGAGT GCCCTTTGCG GCTTGCTGTC TGCCAGCACT GTGATTAGA ACTTTCOCAT CTCAAACCTGA  
AGGAACATGA AGATTATTGT GGTGCCCGGA CGGAACATATG TGGCAACTGT GGTGCAATG TCCTTGTGAA AGATCTGAAG  
ACTCACCTTG AAGTTTGTGG GAGAGAGGGG GAGGAAAAGA GAAATGAGGT TGCCATACCT CCTAATGCAT ATGSATGAAT  
CTTNGGGTCA GGATGGAATC TGGATTGCAT CCCAACTCCT CAGACAAAT GAGGCTCT

SEQ ID NO:1719: (Length of Sequence = 197 Nucleotides)

CCTATATTGT TTTAATTAT TTAAGACCAC CTCCTTACAA CTTCAGAGA GAAATACAA AACAAGAAAC AGACTTGGTT  
TCAAATGCAT AACCAGGTGC TGGAGTTTAA AGCATTACTG ATAACATTGT TACAGAAGAA TGGCAGCTTA CTCCAGGGCA  
CTTCAGTATT CTGAGGAAT AAACATGATT TCGGAAG

SEQ ID NO:1720: (Length of Sequence = 203 Nucleotides)

GAGGGCGGGG CAGAGGGAGC ATGACGGGGG GAGTGAGGAG GAAAGAGGAA AGGAAGGCCA GGGTGGGAGG AAGGATCANC  
TAAATCTGAG GGAAGAAGAA GGAAAGGAGA GGGCCTATTT CATAGCAGAT GCAAATRAAG GGNCTTGGGG CTAKTCAGGA  
AGAAAGGGAA AGGAAGGAA GGCAAGAGAG AGGGGTGAAG GGA

SEQ ID NO:1721: (Length of Sequence = 326 Nucleotides)

GGTGACGGA TGTTAATGG CAATTCGTAT AAACCAAGCC CATGCACAAG TAGAAAGTGC CCGTGGAGCC GGCAGGAGGC  
CCCCGCCGCG NTAGAGAAC ACAAAGCCGG CCGTGACGCC CTCCCGCGG CGCCTTAAAT AGATTCTTCA CTATACTCTG  
TATGTTACAG TATGTACAG ACCCTTCCCC TCGGGGAGCG GGGCGGACTN CGCAACNGT TCCTATGTAC ACCACCTCCC  
CTTTCGGCCC TGAGGTCACT GGCCAGAGTC GGGTGATGGG GTAAGANAGG GCCAGAGAGG GAGGAAACAG ACGCAAACAT  
GCGGAG

SEQ ID NO:1722: (Length of Sequence = 291 Nucleotides)

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TGTTTTTAA AATGAGAAAA TTTGGAGAGA GAATACTATT ATGTCAACGG TACAAGACTC TGAATCTTGA AGATGTAGAT  
 GGATATAATA TTTAGACTTT ATATACACCC ATAGATATGT ATTTATATAT GCATACGTTT TGTATAAATT TACAATTGAC  
 TTTTGTIATT CTCTTINCIG TCATTACAAG AATGAGATGG AAACCAAAAT AGTTGGINCCA TCTCTTACC CAAAGAGGGA  
 TACTGAAAAG TCCGGTATGT GCATGCACIT GTTCTCTGG GGTCAAATCT G

SEQ ID NO:1723: (Length of Sequence = 369 Nucleotides)

GATTGCCCGC TCCCTCGATT CCTTCTGTT GTCTCCAGAA GCTGCTGTGG GCTTGCTAAA AGGGACAGCA CTTGTCTTAG  
 CCGATTACC TTTGGATAAG ATTACCGAAT GTCTTAGTGA ACTATGTTCT GTTCAGGTTA TGGCATTGAA AAAGCTGTTG  
 TCTCAAGAGC CCAGCAATGG CATATCCTCA GATCCACAG TGTCTTAGA TCGCCTTGCA GTGATATTTA GGCATACCAA  
 TCCCATTTGTG GAAAATGGAC AGACTCATCC GTGTCAGAAA GTCATACAGG AAATAINGCC AGTTTTTATC CGAGGACTCT  
 AAAATAAGCA CCGAGCTGNA TAATCGGATT GTAGAGCGTT GTTTCAGG

SEQ ID NO:1724: (Length of Sequence = 231 Nucleotides)

ATGTATTGTT AGTTCGATT CTTCAAATTT TATACATATT TACTTTCTGT TAAAGAGAAA AGGATAAAAT GGTATAAAAA  
 AAGATAAAGC TATTAATTAA GCACGAGAGA GAAGATAAAT GGATATTTTC CCTGTGTGAG GCTAAGACAG AWGCAAATCT  
 CGTTANGAAA AATGCCACCC ACACAACAGG AANTTTATCC AAAACAAAAC AAAAGCAGTT ATAGANCCCC T

SEQ ID NO:1725: (Length of Sequence = 317 Nucleotides)

GTGCAGGGTA GGGTACATAT GGCTCTGTCA GAAGAATACC ATGATTTAAG GGAAGAAAGT ACACAAGGTA CATGGAGGGT  
 ACACAGGGAA AGTACAT A TAAACATGGA CGTGTGCAAA TAGGAAAGAC ATGACTCAGC ATGCTAGACA AATTGCACAT  
 GCTTACCCAA ACACGCT A GGGCAGACCC ATGACCATGA GAGGGGCACA CGTAGCTGTG AATGCAGGGC ACCOGAGAGC  
 ACATGTKACT KAACATGAAG AAAGCATACG GGAAAAGCGT GKTACACAT GNGCATGTTT AGTGGGGCAC ACGCAGG

SEQ ID NO:1726: (Length of Sequence = 282 Nucleotides)

CTCTTGAACC AGATGAGCAG CCACCGAAA CAGAAGCAGA GAGAGCOGGA GTCCTGGGAA TCCAGGAAGT CGCAGAGCAG  
 GGGGTCCAGC ACCCTCAGGA GCAGCAGCAG TCGCCOGAKT TGCCGCTTCA TGGTCTCCTG GCTCTCTTCA AAGTTCCCTT  
 GCACGAGCTC CATGAAGCCA CAGAAACACC AGAAAGCATC CACCTCGTTC TGAATGACGT AGAGGATCGG GGAGAGAAGA  
 TCATCATGTC CTTGGACGTA GCGAGGTG AAGTGATAA TT

SEQ ID NO:1727: (Length of Sequence = 285 Nucleotides)

GAGTATTGAT TTCAGGCAGG ACCCAGGTCC CAAAATGTTA GAAACAGTTA TCCTTTTTCC CTCTGAGTTC GTTATTCTCT  
 GGGGCCCCAG TATCCGTGGC TTAACAACCC GGCTGGATAG AAGGCACCTC TTTCCCCACG TTCCAACAAG ATCCCAGAGC  
 TGCITCTCAT TGGCTCGTCC CTGAGTCAGT CACACTGGAC CGGAAGGTGA AAGGCCCTCA TTGGCCAGNC CCGAGTCATG  
 TGCCCAACCC TGGGGATCCA GCTGTGGGNC TNCITTAACA GCATT

SEQ ID NO:1728: (Length of Sequence = 394 Nucleotides)

TTTTTTTGAT GAGGAGATAT AGCAAAGGGT CATTTGCCCC TCCTTCAGAA AACTTTTCTC CAAATCTCCT TTAAACATAC  
 TGCCITATCT TTCCCTCCAT AACTCCACCA GTCTCTCCAC ATCCCCCTCC AAATCTCTGT ATACATAGGC AAGAGAGGGC  
 GATTCCCAGC ACAAGTCTAG TCCTGGGCGA AACTTCCATC TCTTCTCTCG CATACCTCCT GTCTGGGTAT GGGGATAAGG  
 GAGAGTATGG GATTTGTGTC TCCATTACAT GCTTTTTCAA AATTTCTGTA ATATGTGGCA CTTATAAAAT CAGAACAGAC  
 AAAATGATAT CGGGTAAAAC ATGCAACTGA GAGCAATTG GGGAAAATC CTCAGGNCAC AAAATGTATT ACTG

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SEQ ID NO:1729: (Length of Sequence = 301 Nucleotides)

GGAAGTTAAA GTATTTATTG ATGIGTTTAA ACTGIGTACA TTCTCCACAG ATCATATTAA GNGTITTKTA GSKGAAGTTT  
 AATCTGTGCA TAGTGGGTAG YGACATGAWT AGGGTCAAAG GGGAGGYAAA AGGAAAAAAA CAAAACAAAA ACAGTCACAG  
 GAAAWTAAAA ATACACCMCA GGTACCAGA ACCTTCAGGT TTAAATAAA ANGNAGNAA AAGCAGAAGC AGTGAGCATC  
 GGCATCAACC TGTACAAGCA TTACAAAAGG CTCTGTGAC GGAAACACAA TTGTTCAAAG G

SEQ ID NO:1730: (Length of Sequence = 312 Nucleotides)

GACGRACGCT CTGCCACGC CCTGAGCGTG TACACATGAT GTNTTCTATG CATTACCCCT GCCCCCAGC CCGCCCTGCA  
 GAGGACAAGA TGGGTGGCCC CGGCTCCCTT TCCCCTAACC GCCCCTGCCC GCTGTGCAGC CGTGTGCGTT GCGGTGTGTT  
 TCIGTGTAC TGGCGTGTCA CGTGATGTAG CCGTGTGTC TGACATGAGC CCCTGCCCC TTCTCTGTTT CTCCGTGTT  
 TTCTAGAGCT CTCTCCCTCC CTTTCTCAGA GGGGACAGGA CTCTGGGGT CTGGCTCGGG CCCAGAGCCA GG

SEQ ID NO:1731: (Length of Sequence = 392 Nucleotides)

ATCGGCTATG GGTCCCGTG CGTGACAGAG GAGTGCCCGC TGGCAGTCAT CGCTGTGGTG GTTCAGTCCA TCGTGGGCTG  
 CGTCATCGAC TCCTTCATGA TTGGCACCAT CATGGCCAAG ATKCGCGGC CCAAGAAGCG GCGCAGACG TTGCTGTTC  
 GCCACCACGC GGTATTTCG GTGCGGACG GCAAGCTCTG CCTCATGTGG CGCGTGGCA ACCTGCGCA GAGCCACATT  
 GTGGAGGCC ACGTGGGGC CCAGCTCATC AAGCCCTACA TGACCCAGGA GGGCGAGTAC CTKNCCCTGG ACCAGCGGGA  
 CCTCAACGTG GGCTATGACA TCGGCCTGA CCGCATCTT CTGGTGTGCG CCATCATCAT TTTCACGAG AT

SEQ ID NO:1732: (Length of Sequence = 352 Nucleotides)

GTACCTAGTA CTTAGATAA AGGGAAATGT GTGATCTTA ATGAGCTTTA AAAGGAAACA ACTTCTTTTT TTTTTTTTTT  
 TTTTGTAGAC GGAGTCTCAT TTTGTCCCC CAGGCTGGAG TGCACTGGCG CGATCTCTGC TCACGTCAAG CTCGCGCTCC  
 CGGGTTCAGC CCATTCTCT GCTCAGCCT CCCGAGTAGC TGGGACTACA GGCTCCACC ACCAGNTCG GCTAATTTTT  
 TGTATTPTWA GTAGAGACGG GGTTCACCG TGGTTAGCCA GGATGGTGTG GATCTCTGA CCTCGGTGAT CCACCCACCT  
 CGGNTCCAA AAGTGCTGGG GATTACAGG GT

SEQ ID NO:1733: (Length of Sequence = 321 Nucleotides)

TTTTTGTMT GTTGTMTGT TTGTTGCAG AGTCTGCTC TTGATCTATC TCCCAGGCTG AAGTACAGTA GTGTGATCTC  
 GGCTTGCTGC ACCCTCTACC TCCCAGGTT CAGCAATTCT CATACCTCAG CCTCTGAGT AGCTAGAACC ATAGGCACAC  
 GCCACCATAC CTGCTAACTT TNCATTTTT AGCAGAGACT GGATTTTGGC ATGTTGGCCA GGCTGGTCTC GAACCTCTGG  
 CCGCAACTGG ATCTGCCAA CTCAGCCTC CAAAGTGCTG GGATTACAGG CATAAGCCAT TCATGTGCGG TTKTTCAACT  
 G

SEQ ID NO:1734: (Length of Sequence = 208 Nucleotides)

AAGTCAACGT ATCTATTTTT ATATGAAAC ATTAATTTTT GACACATTGC CTCATTTGCT TTTTAAAT CTATTATCTG  
 ACTTAAACCT ATTCAGCAA AATGCCAATA AATTATATTA ATCATACTTT GGGTCTTTTT AAACTAGGA ACATAATATG  
 TTTTATGATA AACAATAATA CTAAATCTGA GTTGTATGAA CTGTTAAC

SEQ ID NO:1735: (Length of Sequence = 347 Nucleotides)

TCTATTACCT GTACAGTATG GTTTATACGT TGGTGAGTTT CTAAGGGGGA AGCCGGCCAG GGAGCGAGCC CAGAACGGAC  
 CGGACGCTG TNCACCCCA GCCCTGCCCC TTGGCCGAG AGGCCTCAGC CCTGGGGAGG GAGGGGGCAC TGGTGCCCCC  
 AGCCTCTCCA ACCCCCAAAC TGCTGCTGCG GGGAAACCCC CCCACCCCGC CTTGAGAGCC CTCCCCCTTG GACTAGAGCG



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GCTGGGCAGA GCTCTAAACA GGGGCAGGGG CTCCTCTGCC AGCCTGTGGG CATGGCAGTC ATTCTGGAA GGGGCAGGAC  
CTCCGGCCTT GTCCATTTCG GGGGGAA

SEQ ID NO:1736: (Length of Sequence = 356 Nucleotides)

GACACAGGGA GGGGAACAAC ACACACTGGG GCCTGTGTTGG GAATGGGGGG TGAGGGGAGG GAGAGCATCA GGACAAATAG  
CTAATGCATG TGGGGCTTAA AACCTAGATG ATGGGCTGGG CGTGGTGGTT CACGCCTATA ATCCAGCAC TTTGGGAGGG  
TGAGGCGGGC GGWTCACGAG GTCAGGAGAT CAAGACCATC CTGGCCAACA TGGTGAAACC CCGCCTCTAC TAAAAATACA  
AAAATTAGCC AGGCATGGTG GTGGTGCGT GTAATCCAG CTACTCAAGA GCCTNAGGCA GGAGAATCAC GTGAACCTGG  
GAATCGGAGG TTGCAGTGAG CCAAGATCAT GCCACT

SEQ ID NO:1737: (Length of Sequence = 324 Nucleotides)

TGTTTTCTAA TGATTTTTAA TTTTTCAGAG GAAAAATAAT TCAAGAAATA AAACCTAATT CCCCTGAGTC CTTATTGAAT  
TAAATATGA AAAACAATGA ATGAATGATG CATCTTATT AATGGACTGT AAGAACTGA TATAATGGAC TTCACTCTAC  
AATTCGGTTT CTTATTGCT TACACATGCT CCTCGAAGCTT AAACATTTTA GGACCTTAAC ACCATTTCCC TAGTACAATT  
ACTAAAAGAA AGCTTTGGAT AATATAATAT CAGGGAAGAT AGTACAACAT AGTGAAGGAT GACATAGGNN AGATGTGAGG  
AGCA

SEQ ID NO:1738: (Length of Sequence = 316 Nucleotides)

GGCACCTGG GCATGTCAG CCTGGAGCAG CTGGAGCAGA ACTTGGCAGC AACAGAGGAA GGGCCCTGG AGCCGGCTGT  
CGTGGATGCC TTTAATCAAG CTGGCATTG GGTGCTCAC GAATGTCCCA ACTACTTCCG CTAGGCCCAT CATGGCTCAG  
GCTGCCAAG GCTTTTNTGT CACCTCTTTT GTTCTCTCAC ACTGACCACT CTTGGCCTTA AGCTGACTTA GAAGGGTTT  
TCTGAATTGT CTAGATCCAT GCATTATTT TCTAGCTTCC TGCTTGCTC CCTATTCACT TTACTCTGTG AAAGGT

SEQ ID NO:1739: (Length of Sequence = 398 Nucleotides)

CAAAAACCAT CTCAGGATAC TGAGAAGCCT CTGGAACCTG TGAGTACTGT TCAGGTAGAG CCTGCAGTTA AGACTGTAAA  
CCAACAGACT ATGGCAGCAC CAGTAGTCAA AGAAGAAAA CAACCTGAGA AAGTCATCAG CAAAGACCTT GTTATAGAGA  
GGCCTCGACC AGATTCAAGA CCAGCAGTTA AAAAAGAATC AACTTTGCCT CCCAGGACCT ATTGGAAAGA AGCTAGAGAG  
AGAGATTGGT TTCCAGATCA AGGATACAGA GGTGAGGCC GAGGTGAATA TTAATCCAGA GGTGGAAGC TATAGAGGTT  
CTTTATGGGA GGGGCGTGGC AGNGGGTTGG TAGGGGGACA CACTTCGAGA TTATCCTCAG TATANGGGC AATAAGCC

SEQ ID NO:1740: (Length of Sequence = 376 Nucleotides)

GAATAAATTC GCAAACTATG CATCTGACAG AGGACTAATA CCCAGAATCT ATAAGGAACT CAAAAATCA GGAAGAAAA  
AAATCCCATC AAAAGTGGGC TAAGGACATG ANTAGACAAT TTTCAAAGA AGATATGCAA ATGGCCAGAA AGCATATGAA  
AAAATACTCA ACATCCCTAA TTATGGGGA AATGCAAATC GAAACCACAA TGCAATACCA CTTTACTCCT GCAAGAATGG  
CCATAATTTA AAATCAAAA AATAATAGAT GTTGGGTGG GATGTGTTGA AAAGGGAACC ACTTTTACAC TGCTAGTGGG  
GATGNTAAC TACTTCGGCT ACTATAGNAA ANCAGGATGG GNGGATTCCT TAAAAG

SEQ ID NO:1741: (Length of Sequence = 322 Nucleotides)

CAAATGCAA AATCAAGACT TGTCATAAN TGTATGTCCA TAGCCTATAC TGTTTAAATT ACTNTAACIN TATAGTAAGT  
CTTGATGTTT AATACAGCAA ATGTTAAACC AAGCTTTTAC TACAGAAATA AACAGAAAT TATAGGCGCT CATATCCTT  
TTAGACAAAG TTGTATTTGC TTGCTATT TTTTGTGTTA GNTTTKTC AACTATTCA CAAACAGGNA CAWRATATT

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TAAATTGTTA ATAGAARTTT CCAGTTTTCT TTAGTCTCTG GCTACTCCAA GTACTGGTGT CTGTGAATGA CCTTTTCATG  
AG

SEQ ID NO:1742: (Length of Sequence = 322 Nucleotides)

CCCCCAGCC AGGAAAAAAA AAAAAGCTT TGAGGAATGA GAGAGGGTGA GATGGGTGGA AGAAGGTGCT GGGCAGCCAC  
GGGCGCCACG CCTCANTGGC CCCAATTGCC GAAGCCGATC TCCTGCTGT ATCTGTAGT GAGGATGTTG GCTTTGCGCG  
TNAAGTTTGA GAGCACAGTG TGCAGCCCCG GCAGGTGGTA GTGGAAC TNC TGTTCCAGGT CTTCTTCGCC GCGTCCGAA  
CCCTCCAAGT GGGCCAGGTC CACCAGGATG TCCTTGGGAC TTCCAGGCAC TGCCCTNCTC GNTCCCAAGC CGGTNGGAGG  
CG

SEQ ID NO:1743: (Length of Sequence = 250 Nucleotides)

ATGGGTAGGG GGCCAACGCA GTCACGCGG TCCGAGTCA CAGTCCAGCC ACTGACCGCA GCAGCGCCCT TGCGTAGAGC  
CGCTTGCGC GAGAACACTG AATTGCCAAC GAGCAGGAGA GTCTCAAGGC GCAAGAGGAG GCCAGGGCTC GACCCACAGA  
GCACCCINAG CCATCGCGAG TTTCGGGGG CCAAGGCCAG GAGAAGCCG CCATCCGCA GGNCCNGTC TTTCAGCGAG  
ACNGAGTTT

SEQ ID NO:1744: (Length of Sequence = 247 Nucleotides)

GATGATTGAG TGTTCTTTA AAAATAAAAA CCCACAAAA AAGCCAGAAC ACCCTACCCA ACCCAGCCCA GTGTAAACAGG  
TTAGCCATTA ACACAGNATA AAGAWGGTCC CAGCCACACA CGTCATTACT CGGCAGAGGG TGTCAGKCT GGTCCGCCGA  
CGTCACAGTG GATGGCCCTG CGTGGCTGGG RCACAGACAG GGNGCAGGCA TGGCACCTTT CGNCACGAG AGCAAGCATA  
GGCTGTA

SEQ ID NO:1745: (Length of Sequence = 379 Nucleotides)

TTCTAAACCA GTTAATAAAT TCATTCCACA AGTATTTACT GATTACCTGC TTGTGCCAGG GACTATTCTC AGGCTGAAGA  
AGGTGGGAGG GGAGGGCGGA ACCTGAGGAG CCACCTGAGC CAGCTTTATA TTTCACCAT GGCTGGCCCA TCTGAGAGCA  
TCTCCCCACT CTCGCCAACC TATCGGGGCA TAGCCAGGG ATGCCCCAG GGGGCCAGG TTAGATGCGT CCCTTTGGCT  
TGTCAGTGAT GACATACACC TTAGCTGCTT AGCTGGTGCT NNGCCTGAGG GCAGGGCAGG AAAATCAGAA TAGCATTTGC  
TTTCTCTGGG GCAAAAATGG GAAAGTTCAG CGGGNNGCAG CAGGAATCAA GTGGGCATT

SEQ ID NO:1746: (Length of Sequence = 472 Nucleotides)

TTCATGCTGT CCCTTCATTG AATTTTAGAA TGATTGAAGA TAGTGGGAAA AGAGGAAATA CCATGGCAGA AAGAAGACAG  
CTGTTTGCG AGATGAGGGC TCAAGATCTG GNTGCGATCC GACTCTCCAC CTACAGAACA GCATGCAAGC TTAGGTTTGT  
TCAGAAGAAA TGCAATTTGC ACCTGGTGGA CATATGGAAT GTCATAGAAG CATTGCGGGA AAATGCTCTG AACAACTGG  
ACCCAAACAC TGAACCAAC GTGTCCGCT TAGAGGCTGT GCTCTCCACT ATTTTITACC CAGCTCAACA AACGGGNTGN  
CAACCACTTC ACCAAAATCC ATGTGGAGCA GTCCATCAGN CTNCTNCTTA ACTNCTGCT TGCAGCGTTT TGATNCCGGA  
AGGCCATGGT AAAATTTTCA GTATTGCTT GTCAAAAANG GGTTTITAGG NCCATTGTG TGGGAGGGGA AG

SEQ ID NO:1747: (Length of Sequence = 351 Nucleotides)

AGGATCAGAA TACTTTAATA AGATACCACT GTCAAAATAC ATTTCCTTAT AAAGTTAAGC TCCATACAG TTATAATGTT  
GTCAGTAGGA ATTGACAAT ATAATAACGT TCATGAAATC GTTACGTTGA CAGGTAGGGT TAATATGAAG CTTGGAATAT  
TTTCCAGTGT TTTAGTAAAA CTGCAAGGGT AAAATGCCCT TAATGCCAGG GCAACACACA CAGGNAATCA AATACCAGCA

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TTTACACGNC AGTAACCCCTT CAAGTTCTGC CACCCTGTGT GGGGGTAATG CCGTGCAGCT AAAAATATGG GTTTTACGNA  
ACANCCATGG CCTAAGGGGA TTTCTCATAG G

SEQ ID NO:1748: (Length of Sequence = 428 Nucleotides)

AATAGCTTCA GCTGATTGGG TGAGTCCTAT TCATGTTATA AAAGGTACTC TGCTTTCCCTT AACATTCCAT AAATTTTAAAT  
CACATCTGCA AATACCTTCA CAGCAACATC TAGACTAGTG TTTGACCCAA CAACTGGGCA CAATAGTTTA GCCAGTTTAA  
CACATAAAAC ATCATCACAC TATGCTTCTC TTCTGTGTTT TTTGTACCA CGTATCTGTT CCATGTGTTT TNCCTTGTAT  
ATATCCTATC CTGTCTATC TCTCCTATGG TTTTGTGGAA ACTATAAGCC TCTGGGGGG TAAACACTA TATCTTTGTT  
CAATTGTTAA TACATCGNAT AGCATATCAT GCCTGGGGGC ATTGTTTAA CCCCCATTT AAATACAGCT NGGCAGCAGG  
ATTTTAGGCA TTCCGTCATG GTGTGCCA

SEQ ID NO:1749: (Length of Sequence = 478 Nucleotides)

GGTTTCACCA TGTTGGCCAG GTTGGTCTCA AACTCCTGAC CTCAGGTGAT CCACCTCAGC CTCCTAAAGT GCTGGGATTA  
AAGGCGTGAG CACNCACAT CACACCTGGC CCTCAACCAT CTCCTTCACC TTCTGCTCAT GACAGTTTAC TAGAATTTTT  
TTCTTTGAG ACTGAATCTT AAGTCAAAA CAATAAAAAA TTGCTAATCA TTAATATGAC TCCAGAGCTA CTTGCTTCTT  
TAAATATCC TGAANTTATA AAATATAAAG CCAAAGCAAT GAATTTCTAA TGGTGGAAAT GTAGACACTG TGGGCCCCCT  
GGGATGTTA TTTTCAGATG GGGCAAGGGG ATATTCTTAA CCTATTTTAA AAATCATGCC AGCCTAGATA ACTATGTGAA  
AAATATATGG GGTGCTTAGC AAAACTATTA CCTAGCAGCC CTTTGGCAGT TTAACATTAA AAATCCCTTT ATTAGGTT

SEQ ID NO:1750: (Length of Sequence = 439 Nucleotides)

GACATTTTAT TTCCAGGTG GCACGTGTAT AAGGCACAGG GGCAAATGGC TTTGGGGTCC TGGAACTGGA AATGGAGACA  
GGTGTGCTC AGGTGTCCTT GCCTCCACCA CCCCCTAAGT GCCTTGAGA CAGGACCACT GGTGGTGGTT CCAGCCCAGG  
GTCCTGAAGG GTNCCACTGG CTCTAGGGGA GAGCCATGGG GACAGCTCCC CAGGCGGGAC CCTCTACTCT CCAGCTACCC  
AGGAGGGACC CTNCTCTCT AGGGGGCGAG GCCAGCTCCA AAGTGCTTNG TGGCTCCCCA GGCTTAAGGG ACCAGCTGAC  
CAGGGAGGGC TNGGNTCANA GAGAGAATAG TAAGATNAGA CGAGGAGAAG CACCCCACTA GCACGGCGAT TGGANAACAC  
TNTGGCGGT ACTCGTCATG TGGTAAATTT GCCAANTTC

SEQ ID NO:1751: (Length of Sequence = 347 Nucleotides)

CTCTATTACT TATGATTACA CCATGGCAAT ATTCCTTTTT CACCAGGAGC TTTGGACCTG CGCAGGTTGT GGCATGTAAT  
CACCCGGAGC ATGTAGTCAT CTGTAGAAAT CACAGGCACA CTCATGTTTG CTCTGGAAGG AATCTGTTTT CCACAATGAC  
TCCCCCAGC TAATGTACAC ACTGGCATTT TGCTATGCTT CCTCACACAT GGGGCACCAG CTTTGCTTCA GAACCAACCA  
AACTCCACAG AGGCCCTTAA ATATGGGCTA GGGACAGATT TTTTAAAGA AAGAGTTAAG GANGCAGCTT ACAAAGGGAC  
AAGGCAAATT CCACAAGTCA GGCAGCA

SEQ ID NO:1752: (Length of Sequence = 297 Nucleotides)

GGATATTCTA GCCATACAGA TTCAATGGAA CAGAGAAGAG AAAGGAGGTT CCATTGGCAC CATAGTGAGC CATTCAATTG  
CCCAGGGAAG NNGGTGGGGG CTAAGGGGCT AGGTTTGGTC CCATGGCTAC ATTAAATGCT TGGCATGACT CCAGGGCTNC  
TCTAGTTAGT GGCTCCAGCA CAGTATGAGT TAGGTGAGTT AGGTGTAGGA GTTTGGGGAC AAGGAAAAG GGAGGAGGGG  
TCCCTAGAGG CTNGGTGCC ATTACATAGA CTCAAATTCG TCAATGCGCT GCTTTAG

SEQ ID NO:1753: (Length of Sequence = 402 Nucleotides)

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AAATTTAACT TCAACAAGCT GGTGATGCCC AACTACCCAT TCATCAACAT TCGSTCAAGT GGTGTGGTTC CTCAGAGTGC  
 ACCACCAAGT CCAACAGCCT CTTCCTGGTT CCATTTCCCA CCTCTGGACA CCCATTCTCC AACCAATGAT GTGCAGCCGG  
 GACGGTTCTC TGCTAGCTCC CTAAGTCTT CTGGCCAGGA GTCCAGTAAT GGTACTGATA GAAAGACTGA GCTTTAGAG  
 CTGGAGGATG GCTCAGCTGC TGACTGGCGC CGGGGTGTGG ATCCCGTGTG CTCCAGGAAT GCCATTGGTG GAGGAGGGAT  
 TGGCCATCAG AAACGCAAGC CTGACATAAT GCTTCCTCTG TTTGCTAGGC CAGGGATGTA CCTGACCCC ACAGTCTTTC  
 GT

SEQ ID NO:1754: (Length of Sequence = 397 Nucleotides)

CAGTGGCATC TATGGCTCTA AAATGGAAAG GAGGAGTCTT GGATTCAGGC TACTGACTTA CTCTGTGAAT TTACACATAA  
 CTTCCTTTGA GCCACAGATT TAGCATTCTA CCAGTCACCT GATATTTCTG AGCAGCCACA ATATTTTAAA ACTATATTTA  
 AATCTGAATT TGGATTTAGC AGAATTTTAT TTTTCCATT TCTATTTCT ATGCTCACTA AATTGAAATT ACAACCATTG  
 TAAATTTGA TATCATTTAA TATGTAGGAC TTTATCCAGT TTCAAAGTAA AGATGTCTCT AATGTAATTA ATTGTNATTT  
 TCACTGATGA GACTGAAATA CAATCAGTCT GTATGTGTG GTGCGTATGT ATCAGTGGTA AGAGGCTATG ATTAGAC

SEQ ID NO:1755: (Length of Sequence = 353 Nucleotides)

GAATTACTCT GTTGTTCACC TTTTGCTTTT TGCAGTGTIT GTNCTCTTAT CTGTATTTTG AGCTTAGTGC TAGGACTGAG  
 AGGCTGCACC ATAGGGAATG TATGGGAGAT GGTGAGGGGT GCCAGTNAGG GGTGCGTGGA GGAGAGGCCT GGGCTCTCT  
 ACTGGATCTA CACTCTGTCC CAGGTTTTTA GATCCCACTG AGCCCACTG ACTGAAAACA AGGACAGTCA GGGTGAAACT  
 TCTTTTGCCA GAATGTGGC CTGAGTTGAA TTTCTGGGAG GATGACGCAG ATGTCTGCTG CAGAGCTGGG CTGAGAGTTC  
 TCAATCTAG CTCTGACTTA GTCAAGGGG CCT

SEQ ID NO:1756: (Length of Sequence = 184 Nucleotides)

TGGGCTCGGA GCATCGAGCT GGACATGCGC ACCATTGCCA CTGCACTGGA ATATGTCTAC AAAGGGCAGC TGCAGTCTGC  
 CCTTCTTAG CCTCTGTTCC CTCCCCAAC CCTATCCCTC CTACCTCACC CGCAGGGGNA AGGAGGGAGG CTGACAAGCT  
 TTGAATAAAA CACAAGCCTC CGTT

SEQ ID NO:1757: (Length of Sequence = 425 Nucleotides)

ATTACAGGCG TGANACCAC AACTGAGCTA ACTTCCTGGC TTTTCAATCA AACCATCTTT GTCATTCTCT GTCCCCACCT  
 GAAGTCAGAA AGCCTGAAGA GAAGACGGCT CTATTGCCNC AGCTGGAGTG TGGTGSCACA ATNTCAGCTC ACTGCAACCT  
 CTGCTCTCTG GGTTCAGGCG ATTCTCTGT CTAGTCTCC TGAGTAGCTG GGATTACAGG TATGCACCAC CACGCCCTGC  
 TACTTTTTCG TATTTTITAGT AGTAGAGATG GGGTTTCACC ATGTTGGCCA CGCTGCTCTC TATCTCTGA CCTCGTGATC  
 CACTGCCTC AGCCTCCCAA AGCGCTAGGA TTACAGGCGT GTAAGCCACC ATGCCCCGCC AATTTTGCCA GTTTTATTTG  
 GGCATTCCT TATTGAGATC TAGGG

SEQ ID NO:1758: (Length of Sequence = 407 Nucleotides)

AGGAAGGCAT AAGCTAAGCA TCCTTCTAAC CAGTTCCCAA AGTCCCATCT GCCTCCATGT ACCAGCTGAT CGCAGAGCTG  
 GACTGGGGCA GGCTGGGCTT CCAGGAAATT CCTGAAGTTC TGAAACAGCT TCCCTCTAG AGAAGCCAC CCAATGTGTT  
 TTTTAGTGAC AGGAAGAAAG GAGGGAAGAG CTGATGTGGT GTGGCCTGCC CATATCATAC AACCCACCA GGAGCAGGGC  
 AGTTCCCAAG GTGGGTGCCC GTAGATCTGG GAGGCCAGGC TGGCATGATT CCTGTGAAGA ACTGTGCTG TINTGTCAGG  
 GAGAGGCCTG AGCCTCTCA GAAGCAGGA CAGCCACAAC TGAAGAGCAC GCCAAGCTGA GGCAGCAGCA GCAGCTGGGG  
 GAGCAGT

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SEQ ID NO:1759: (Length of Sequence = 386 Nucleotides)

ATATATTTT TTTGTTAAAT TTCTTTGTAT TTTTTCCTG CAAGACTTGG TGTGCGCGC ACTGTTGTAG TTTAACTTCA  
 ATCCCAAAT CCATGAAATA GAAATCAGAA GTAAAGGTTG AGAGGGGAGG AAGGAGGGAG GCAAGCCAAG GAATAAACAA  
 GAGTTTGA CT AGAAAAAAG AAGAGGGTAT GTGTGGTGGG CATTCTCTGG CAAGGCCATT CCTTGAGGGA GGGGGTTGGC  
 AGGCAGCTTG CCTCTGCCTC ATGCAGGGGA GGGAGGAAAG ATCCCCCTGG GACCCTGCAG TCCCCTCTTC CTAGGGCTTC  
 CTGCTCCCAG GGGAAAACT AATACCAGAG AGGATCAGC CACAACCTNA AACAGGGCTC TTCACC

SEQ ID NO:1760: (Length of Sequence = 395 Nucleotides)

CTTCATGCCT CTGGCCGGGT CCAAGCTGGC CAAGAAGAGG GAGGAGGCCA TTGAGAAGGC CAAGCGCGAG GCTGAGCAGA  
 AAGCCCGAGA GGAGCGAGAG GNGAGAAGGA GAAGGAGAAG GAGCGGGAGG AGAGCAAGAG CGAGAGCNTG AGGCAGAGCG  
 GGCGGCTAAG GCGTCCAGCT CAGCGCATGA AGGTGCGCTC ANTGACCCAC AGCTCAGTGG TCCTGGCCAC ATGCGGCCAT  
 CCTTCGAGCC ACCACCAACC ACCATTGCTG CTGTGCCCC CTACATCGGG CCGACACAC CTGCCCTTCG GACTCTGAGC  
 GAGTACGCCC GGCCCCACGT CATGTGCCCC ACCAACCGNA ACCAACCCCT CTACATGCCC TTAACCCAGC GACCC

SEQ ID NO:1761: (Length of Sequence = 378 Nucleotides)

CCCACCAGAG CATTCAACA AGGCTTACCA CACAGGCCCC AGTACCTTTC TACTCTACAA TGAGGCTCAG AAGCTCAGTG  
 TACCACCCCA TCCCCAGGAG GCCCACTTAG ACCAGAAATC CCAAGTCCAT TAGCTACAGG CTGATATTCA GGGACATCGG  
 TGTAAACAAA GAAGTGGGAT ATGAATATA TCCTGATT TTTTTCTTT TTTTTTTTT TTTTGTAGAC TAAGTCTCAC  
 TCTGTCCCC CAGGCTGGAG TGCAATGGCG CGATCTTGGC TCACTGCAAC CTCCGACTCT CAGGTTCAGG AGATTCTCTT  
 GCCTCAGCCT CTTAACTGGG GTAAACAGACA CCTGCTACCA TGCCCGGCTC ATTTTTTT

SEQ ID NO:1762: (Length of Sequence = 351 Nucleotides)

TGATAAATAA AGAAGTTCAA AAAATCTTT TAATAGAAGC TATAAAATAG CAGATAAGCT AAGTCATTCT CATAAAACAC  
 CATTGTGCT TGAATGCGT GCATTGTGGC CTGTTACTTT TAAC TAGTCT CACTAATT TAAGTTATATA TGATGTAGAT  
 CTAGATTGTG ATGTACACTA AGTGGGTGA TCCYGAGATC AAGCTATGAT TGCTGCTTGC GTAAAGTGTT CCYTTTGGGA  
 AATAAATAAT CTTTCATATC TGTAACTTT GGTATAATG GTTATTTATG CAATGTATTG TTGTGGTTGT CAACTCAAGA  
 TTGTATTCTC ATCTGGGGAC ATTATGAATC T

SEQ ID NO:1763: (Length of Sequence = 157 Nucleotides)

GTGTWTACTT AGTGTGTAAA GTGAACAAGA AAAGCAGCAT AATAAAGGAG CTGTGTTTTT ATCAGAGGAG CCTTCCTTCT  
 GAGTTTTTAC ATAAGTTGAT GCCTTCAC TG CAACTTTGAA TACAGTGCTT TGAATGTGA AACACTTGAA TAAATG

SEQ ID NO:1764: (Length of Sequence = 321 Nucleotides)

GCTCCTCTGC CTTCAACTCC TCCAGCTTCT NACCACTTGG CAACGCACCA CTGCCAGTTC CTCTGGGGCT CTCAGAATCA  
 CTGGAGTACT CTGCAGCTC TCTTGGATGA CCTAGGGGTG CAGCAACAGG CACAAAGCTC TCCTCCAGGT CCTGGATTTC  
 TTTATTTCTT CCCCTCCTTC TCCTTGGTGT ATTINTCTG TGAGNGTCTG ACTCTATCAC TTTCAAAGCT GTGCTGTGGA  
 TTGGGTCTT TAGATGAGGC TTCATGCCCT GGNATAAGCA AAGGAGCCTG ATACAGAGTT GGCTGCGAGG GAGCAGCTTT  
 T

SEQ ID NO:1765: (Length of Sequence = 420 Nucleotides)

TCACGCCTGT NATCCTAGCA CTTTGGGAGG CCGAGGTAGG CAGATCACCT GAGGTITGGGA GTTCGGGACC AGCCTGCCCA  
 GCGCGGAGAA AACCCGTCTC TACAAAAAT TTTAAACTT AGCCAGGCGT GGTGGCGCAT GCTGCAGTTC CAGCTACTCG

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GGAGGCCAAG GCTGCASTGG GCTGTGATTG TNCCACTGCA CTCCAGCCCA AGTGACAGAG CAAGACTCTA TCTCAAAAAT  
 CAAACAACAA CAACAACAAA ACACCACATA CACACACACA ATGAGGGTAA ACAAATAAG TATGTGTGGG TCACACTTCA  
 GCAGGGGTGG CTGGTTTGCC AGAGGAAAGT GCAATTATTT TATCTATGGG TGTATTATGT CTCCACTCTA AACTGTCACT  
 TACAGATGGC AAGACTGTTT

SEQ ID NO:1766: (Length of Sequence = 373 Nucleotides)

GTAAATACT AAGACACTAA ATGCGTATTT TAAATTTGCC CATTAGTTT TGGGCTGGT AAGAAATTAG TAAAAAATAT  
 TTCCAAATAA CATGCAGAAG TTGTTTTTAA ACTTAAATC TCATATTTTA GCTACACCCA CAGCGATGCT ATAGAGAGGA  
 GCTGGATTTC GTGTATCTG AATGGCTCAG ATTATGTTCC TTCCAAAAA GTTATTTTAT GTACGATCAT TTTTATATG  
 ANGCAATGA AAAATCACCC AGAATCTACC ACGTATTTAC CACATAGACA AATGTCCATC TTTAGATCTG TCATTCAACA  
 CCATGTTATT CTTTTATGC AACAGAATGC AGTGTGTGA GAAGTACATC AAG

SEQ ID NO:1767: (Length of Sequence = 330 Nucleotides)

GGTGACAGTG GCGGCANAGC AGCAGCATGG TGGCAGCCAC CAGTGGGCGT GGGGCCCCCG GGGGAGAGGA TGCCCCAGAG  
 GTGCATGAGC AGACCTCGTA ACCGTCCTCC GAGCGGCTCT GGTCAATGTTG TCCTGGAGGG GCGCGGGGCC CCTCTGCCGC  
 GTCCACGCCC GCAGCCACAG ATCCATCGGC CTGTGAGTCT CCACACACCA GCCAGTCCCG GGCGTGGAC TGTGGGTACC  
 CGGGTGCCAC CTCCAGCTCG CCATCCAGCA CTTTCCAGTA CTCTGGCCA CGGAAGAAGT AGGAGGCACC GTNGGACCAG  
 CGCATGGCGT

SEQ ID NO:1768: (Length of Sequence = 361 Nucleotides)

AAC TGAAAAA CCAAGACTGG TAGACTCTCT TTTCTTCAG ACAATAGGCA GGAGCCAGGC GGAGTCCAGG GATTCTTGSA  
 ACACCTATCT TTTCTTCGGA GGACACTAAG TTCTATTGA AGACAAAGTT CAATATGGCA ACAGGACTGA TGGGACACGA  
 AGGAGTCGCT ACCGTGATTT GGTGACAGTT CTTCAAAACG ACAGTNTCTC AAGGAAAGGT GGACCTAGGA ACTCCTGAAC  
 TTTTGGGTG CCTTAAGTGA GAAATCAGCA TGGCTCAGGC AAGTCTCTG GCTTGTGAAG GCCTAGCAGG TGTGAGTTTG  
 GTTCCCACTG CAGCCAGCAA GAAGATGATG CTGAGCCAGA T

SEQ ID NO:1769: (Length of Sequence = 389 Nucleotides)

CAACTACCGC AGCGCCAACT TCAGAGAGCA CATCCAGCGC CGGCACCGGT TTTCTTATGA CACTTTTGTG GATTATGATG  
 TTGATGAAGA GGACATGATG AATCAGGTGT TGCAGCGCTC CATCATGAC CAGTGAGCAG AGTCCGTGCT TGCTATCTGT  
 CTCATGTTAC AGAGCTTCCA TTACATATTA AACGTGAAAT CTATGACTCC TGTACCTTAC CTGTTCAACA GACCTGAAAA  
 TGAGCCATGG CATTGGGACA GGGTCACTTC TGACAGGGGA AGTGGGTCCC CAGGTGAGCC CTTCTCTTCC CTTTGGGCTC  
 TTGCCAAAGN TGTCTTCCCC TACTGTAAAN CTGTGTTGTC ACACGGTCCA GTTCGTATTG GGTCTCGG

SEQ ID NO:1770: (Length of Sequence = 394 Nucleotides)

GCACTTTAGA GGAAGCTCCT TCTGGGCAAG GTCAGGCGGT CCTCCTTCCC TCTCTCCTTC CCCTTTGTCC CAGCCTCAAC  
 TGACTCTGGC TGTGGGAGGT GTGGAGGGTC CTAGGCTTTC CCTCCCCAAC CTGGCTTCCA CCAACACCCC TAACAGGAGG  
 CCGTGGAAAG GCTCAGCCTC TCCTCCGCAT CCTCCTCCT TCTGCCTAT CCGAGGGAGC CAGGGTCCCC TAGGCTGACC  
 CTGAATCCTC TTCTCCTT CATGGGAGGG GGGCAGGAAT CCAGAGGAGG ATGAAGCCAG CCGGACCACA TGGCTTNGTG  
 GCTTNGACAA ACAAGCTCAG GGAGGAAATG AGGAGGCNC GGCCTCAGAG GATTGCAACC CTGTGGGCA CAGA

SEQ ID NO:1771: (Length of Sequence = 373 Nucleotides)

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CAGAAAAGGC AAAGTTTATT CCAGTGTGA CAGAGAGAGG GTGAGCCTTG CACAGCAATT CTAAAAACAT GTCATCTCCT  
 TCACCTAAGA GGTAAAGANCC GGCTGTAAAGT CATGGGGTCA CTAAACCGGC CGCAGTTACA GTAAGCAGAA GAGGTACGG  
 CTCAGGCCTT CTCAGACTTT CCCTGGGACA CACGGCTCTC TGGGGGGGCC CGGCGAAACC ACTCGGACCA GGAGCCATCG  
 TACACGGCCA CATCAGGCTT NCCGAGAGG TAGGCAGCCA AGGNCACGTG GCAGGCGGTG ACTCCCTTGC GGCACGTGGC  
 AATGAGAGGC TTCGAGAGAT CCACCTTCTT GGGCTTGAAC AGAGCACGGA GCT

SEQ ID NO:1772: (Length of Sequence = 281 Nucleotides)

AAAGTGCTGG GACTATAGGC GTGAGCACTT GCATCCGGCC TAGGTGGGGT TTTGTCCCG TTCTGCAGGA GGGAGACTGA  
 GGCTGGGAGG TTCAGGGCCT GCTTGGCTGT ACCCAGCCCC AGTATGTGCC TTGGCCACAC TAGTCAGATC CTCCCCCTCC  
 CACTCCTGCC ACCCTGCTCC TGCCCTGTCC CATAATCCAG GTTGAATGGG GGTGGGGATT TTNGGGAGCA AGGAGGGCTC  
 AAAGAGATGG AGATAGGCT GTTGTGAGGC CAAAAGTGCA A

SEQ ID NO:1773: (Length of Sequence = 401 Nucleotides)

CTCTCTGCCA TGCTAACCAA CGTAGAAGAG AATAAGATAA AGCAATGAAA AGCAGAGTGG CACTCTGATA TATAAGATTG  
 TCTAAGAAAT ATAGAGTGAA TTTTGCCCA AGGCCCTCAC TGAATAATT CCTGAACCA AAGAGTATTT CTAAATCCAA  
 AACTTTACAG TATTAGACCT ACGAATCTG ATGATGCTG ATCAGATGCT AGTGTCTC GACAATCCAT GCAGTTTCC  
 AGTATGAAG AAAGTAACAA ATATACCATG GTTATCTTA TTTCTTCTG AAAAATATCT AGGATATTTT ATAGTGTAT  
 GTGGTAAAT ATTCAATTGA CANTACAAT GAAGTATAAT CAGAAGTATT AGCAATTTTA CTTGTGTTAT CCGTTAATC  
 C

SEQ ID NO:1774: (Length of Sequence = 230 Nucleotides)

TCTGTAAAA AAAAGTAAAA ATGTTACACA TAGGNAATAA ATGTAAAAAG CTATACTTTG CCAAAATAAA GTTTCAGCTG  
 AAGGTAATGC TAGTTATAAA TTAAATACAA TTCTATTAG NNCTTGCAA AGTCAAAGGA AGACGGNAAA CTCCCTCTTT  
 TGGCAATTCA AAGGCAAAGA CCGTTCATT TATCTTAAT TTNCTTTAT ACAATCAITA TCCCCACAG

SEQ ID NO:1775: (Length of Sequence = 359 Nucleotides)

ATTGAGGACA TAGGCATGGG CAAGGACTTC ATGACTAAAA CACCAAAGC AATGGCAACA AAAGCCGAAA TTGACAAATG  
 GGATCTAATT CAACTAAAGA GCTTCTGCAC ATTAAAAGAA ATTACCATCA GAGTGAACAG GCAAACTACA GAAAATCTAC  
 CCATCTGACA AAGGGCTAAT ATCCAGAATG CTACCTAATT TTAAAGACT TTTCCGGCA TCTTGAAAAA AACCACCAT  
 ATTTGACATA GGTAAGACTG AAAAAACAAA CTATTCATAA TTACAATTG TGACACATTA TGTAGTAGCT AGGTTTCATCA  
 CATAAATTAC ATGNTACCCC AGTCAAGTT AAATTTGAG

SEQ ID NO:1776: (Length of Sequence = 375 Nucleotides)

GGCAGAGGCT GCAGTGAGTC CAGATGGTNC CACTNCACTC CAGCCTGAGT GACAAAGTGA CACTCCATCT CAAAACCCCA  
 ACTCCCCCA AAATTTTAA TTTGGTTGC ATTCTTTGA TTATGTTGN GGTGATTGA GACTTGAGGC TGGCACTGGA  
 GCAGGCGTTC CCACCTGTCC CGTGAGGCAA AGGTGCTGGG GAGTGACCAA GTGCATCAGG GGGTGAGAT GCCCTATCT  
 GGCTCTTCA CGCTCAGCCA TCTTAGCATA NGTGAATATA CCATGAGCTG TTTCTCAGCT TGTTTTATTT TCCTGGNGAG  
 ATAGATGTCA CTGGAATGGN CTTTNTCCAA GTGAAAGGCC ATCTTGTGCT ATGAC

SEQ ID NO:1777: (Length of Sequence = 387 Nucleotides)

GATAAGGGAG GAAAGGCAGG AGGAGATGAG GCCAGCCCCA CTGATGACAC CTTGGGCCAG GCCTCAGAGC TGCAGGCATC  
 AGCCGGAAAC TCCAGGCTGC TCATGGTCAC TGGCGGTGCT GAACTGTCTC TCCACTTTNT TTTGGTCTT GATCTTGAGT

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CCAATGTCCA CTCTCTTCTC AAAGAAGTTC ACCAGCACCG ACTCCGTCAG GATGGAGGCC AGGTTCTGCT CAAAGGAGAT  
GCACCACTCG GTGTGACCG TGCCGCCGAT GCGCGCTGTG GGGCTGCAGG CCTNCCCGCC CACCAGCACC GTGTGCTCTG  
CAAGGTCTTC ACATTGCAGG GAGCCCGTNC TGACCACCGA GTAGGAGGAC ATGGACATGT CGTCTTT

SEQ ID NO:1778: (Length of Sequence = 297 Nucleotides)

CCCCCAACT AGAAGAATAC AATTAAAAA AGAGGCAGTA CACATGGTTA ATAAACAGAT GAAAAAATTA AAATCACTT  
GTACTATAAG ACAGGCAGAT TAAATTATTT TTACCTATCA AATTAACCAG AACAAAGGCA TGCACTTTAG TGAGGATGAG  
GAACATACAG ATTCACTGGT GAAAGTAAAT GTACACAAA CCTTTCAAGT TGATAGTTTG GCAGAAGTTG CTAAAAACAT  
TTAAAGCTTT CATACTTTTG ATAAGGCTTT TTATTTTAGA AAACATATAA ATAAAAA

SEQ ID NO:1779: (Length of Sequence = 353 Nucleotides)

CAGAAGTAAA AGATTTTAT TGTCTATAG AACTTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG  
TTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAWT  
GATCAGTAAA AACATGCAAA AGTGAGAAGG AAAGGGAAAA AGGTGCATTC CCCTAAGCTG AGGGGGATGG AATTTCAGAA  
CAGAGGAGGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TCCCTCTGT GTTATCTTTC AAAACAGTTC CCAAGCTTNG  
NGGAAAGCAA TGAGCTCCAC CCTAYTCAGC AGA

SEQ ID NO:1780: (Length of Sequence = 428 Nucleotides)

CGGCTTCCCC GGAGCAGCCG ACAGGGCCAC AGGAGAATGG TATGCTGCTC GGCATGGAGT GAAGACCACC CCGTGTGCAA  
TCTGTTCAAC TGTGGGTTTG ACCGGCAAGC CATTGGTTGG AACATCAACA TCCTGCATT GCTACAAGAA AAATAAGGAC  
ACCGGCAGCC CTTAGTTTCA CTGTTTGCCA GCACAGACCT TTGATGGGTG CAGGCTTTTC TGGTATTAA TCAGCCATTT  
TTGTGAGAGT TTGACCCCTGG AAAGGGTGCT TTGTATATGT TCTTTTCACA TAGTGCCAG CTGTCATGAA ATGTACAGAG  
AAATGTGTGG TCGTATTTT TACTTTTGTG TTGTATATGT ATGGATAATT NGGGTCCCTT GGGCAGTAGA GGCAAGCTC  
ACCTCCCATG TAGCACATGA AAATGCTT

SEQ ID NO:1781: (Length of Sequence = 459 Nucleotides)

ACCTCAGATT GTGAAGGGCT CTGTAGGCTA TGTTAAGGAC ACTAGAAATC TATTGAAAGG TTTTAAGCAG AGAATTGACT  
TGCTCATATT TTNCTTCAA AAAGCTCAAT AGCTACAAAA CGGTCAATAG ATGGTAGCTT TGTGGGGCTG GGGTGAATGC  
AATGATATTG CAAAACAAGA TATAGGGAGA CAAGAACTTT TAATAACCTA AACCAGTGGT TCTCAAATTT TCCATGCATC  
AGAATCACCT GGATGACTTG CGAAAACACA AATAATCAGA CTTAATCCCT ACATTTTCTG ATTTAGCAGG TATAGAATGA  
GGTTTAAGAA TTTCTAACAA GTTCCAGAT GCGTAAGGT GTCTCTCAGG GTTTTACTT GAGCAACTGG GTGGATCCNG  
TGGATCTTAT GTCCCTNCGA GTAAGGGGTC AGGTACAGCA TTCTCCGGTC AGATTGTTT

SEQ ID NO:1781: (Length of Sequence = 420 Nucleotides)

GAAAGCACAG GAGCCTGCCT CCAAAGAGGG ACTGTCCCGT AATTNAGAGA TGCTCCAAGG CTGACCATCC TCCITCTCCT  
GCTGCACACC CAGCAGCCAT CTATGGCTG ATTTGGAGAA TTTCTGGTCA AACCGGTGAG TATGAGGAGA GCAGGGCAGT  
TGGGAGAGA GGTCCCAGCC CAATTCTGCC CAGAGAAGCT CCCAAAGAG AGGGAAGTGT CTTGATGAG AGCCCATGAA  
AGGGGTGAGA CCCAGGAGGC TGTGGAGATT GCTGCGGGCT CCTCTGGTCA GTAAGGAACC CTGACAAGAT CCCTAGGATG  
GGGGTCCCTT AGTCTACTG AAGTTCTGT AACTINGGAT TGGGGCCAGG TCANCTCCT CTGATACCCG AGCTACAMAT  
CTGGCTTCCC AMTCTAGAG

SEQ ID NO:1783: (Length of Sequence = 427 Nucleotides)



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AGAGCTTAGC ATGCTGTGG TTCAATTTTT TATGTGTTTA TTTCACATTG ACTTTTGCCG TGAGCTTTGA GGGAGACAAC  
 ACCATCACAT ATGTGTAAAT TGTAAAAGAA TTGGGAGAGA ATAGCTTTGG GAGATCATTT TCTTACTGGC CATGATGAAG  
 AAAGCTGTAT CGTAGGAAAA TTACTAGGTA ATTTTACTCA CTGATAAAG TTAATTTGCA AGGTATCATT CGATTGGTAG  
 AGTTACAAA ATGAGAGTTA AAGAAACAGA AATATGGTTT CAGTTTATGG TGCATTCTTA TCTTTTTTAC TGAGTCTATT  
 TCTGTCTGGT TGCTTCACTT AGTACTCCAA CCAGACAAGA GGAAGACAAC TATGCTAGTG TTTTAGGAAA TGGGACAGAA  
 TGGGGTGATT TAAGTAGGAG CCGGGT

SEQ ID NO:1784: (Length of Sequence = 428 Nucleotides)

ATGGGATACT AATGCAAGCA TTCAGTAAA AAAGTAGATT ACCAACTAT ACGATCCTCA TTTATTTTAA AAAGTGATAT  
 CACCCAGAAA AAAATAAGAA AGATAAAGA TGTGGTAAA ATAACATAAG AATAAAAATA TAGGGGAAAA GGTAGCCAAG  
 GGATAGATAT TGATATTCAT TTCTTTTTTA CAACTTTTAT AAGTTGTAAT TTGTGTGCAA CAGATTGCAT ATATTGGANG  
 TATATAACTT GACTAATTTT GACAAATATA TACACCCATG AAACCTACCAG TTATAATTTT AAACATTTTC ATGGCCCTCC  
 AAAGTTTCCT TGTTTCCTTT TGCAATACAC GCAAACACAC ACACCCACA CACAGTATGT AGGGCAACCA TTGATCTGCC  
 TTCTGTTACA ATAGGGTAGG TTTCATC

SEQ ID NO:1785: (Length of Sequence = 414 Nucleotides)

GTAACAGAT TACATTTGAA CACCTAAATA AGTATTTGTT TCATAATCAT TACATGCTTG TTTATGATTT ACAAAGATTT  
 GGTAGAGAAA AGTACAGTCC TTAAGGCATA TATATGCCAA TGCAATTAAC TACTCAGCTT TTGTGCCAGC TCAGGTGTTT  
 ATAGGAACAG GAATGTGGAA TACCAGCTTT TTAATTTAAT TATACTTTTA TGCTGAATTT TTCTTCCAGT TAAACCTTTA  
 ATTACACTAG TATGTAAAGT AGTTACTGAG AAAAATAAGT TTTTGATTTT CCTTCTGTTG GATCTGTAAC ATTTTTAAAT  
 GGAGCTATTT AACACATGAC ATGCTAATGT TACTTAATGG GTCTCTGCAT TTTAATTTTA NGAAACACAA ACCTGGGTCA  
 CAAACATCT TCAG

SEQ ID NO:1786: (Length of Sequence = 397 Nucleotides)

GTTATTCCAA CCAAAATTTT CTAAGATTGA AATGCAGAAA CTTACAGAAT TGAGTAAAAA GACAAAAACG TAAATACTAA  
 ATATTGAAAA GATGCAAGTN CCCCCAAAT AACTTCATAG ATTTAATAAA ATTCAAATTT AAAGGCAATT AATTAGGGAT  
 GAGGCAAGAA TCTGGGAAGA AAATTAATCT GAAGTTTGTC TGGAAAAATC AATGGGTGAA ACGAAAAATAT TTTAGGATAA  
 GATTAAATGAG AAGTAAATTT ATTTCAATTA TAAANGTAAA ATGATAAAAT AGTTAGACCT ATATGGTACT GATGCCAGGN  
 ATGTTATACA AAGCTACGTC AAGGCTTGAG GATAATTTTN TTGAAGATAT TCGTGGGTAT CTCATTGGCT ATAAAAAG

SEQ ID NO:1787: (Length of Sequence = 408 Nucleotides)

TCCACAATT GACAATATAT ATGCATGTGT TTAAACCAA TCCAGAAAGC TTAACAATA GAGCTGCATA ATAGTATTTA  
 TTAAAGAATC ACAACTGTAA ACATGAGAAT AACTTAAGN TTCTAGTTTA GTTTTTTGTA ATTGCAAATT ATATTTTINC  
 TGCTGATATA TTAGAATAAT TTTTAAATGT CATCTTGAAA TAGAAATATG TATTTTAAGC ACTCACGCAA AGGTAAATGC  
 ACACGTTTAA AATGTGTGTG TTGCTAATTT TTCCATAAG ANTGTGTAAC ATTGAAGTGA ACAAATTACC TATAATGGAT  
 TTGGGTTAAT GACTTATGAG CAAAGCTGGT TTGGCCAGAC AGTATACCCA ANCTTTTATA TAATATCCAG ANGGCTATCA  
 CACTTGTG

SEQ ID NO:1788: (Length of Sequence = 391 Nucleotides)

CAACTTGGAA CAACTTTTAA TTTTGAATGC TGGTCTGATC AGTCCACGGC CAGGGGTAGG TGGTAACTAG AAACAGCTGG  
 AAGGAGGGAA GGAGAGGGGA CCAGCAGTCC GCAAGCAGGA GGAAAGGAAA GGGTTGGGGA CAGGAGGAGG CAAGGCTGAG  
 GAAGGACCCA GCCAGCTGGG TGTCTGCCCC GGCTAGAGAA CGAACCACCC CCACCCACCA GGCTACCCTC CATCTGTGGC

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TTCACTGCAG AAGTCAGTCC AGGTGGGTTT AGGCCCATGC CACCTTCTCT GGCTGCACA GTCCACCCC AGSCAAGGGG  
TTCTTTCCAG AAAGGCTAAA TGCTCTGTCC TAANCCTNGG AAGTGTCCTT TTCAACTAAA CCCCTGGCCT T

SEQ ID NO:1789: (Length of Sequence = 312 Nucleotides)

CAGGGTGAAG TGAGCCTGTG TGGGAAATGA GTCTAGTGTG AGGAGGCCCTG GCTGCTATAA TGATATTTAT CTCACAGTTT  
ATATTTCAAT CATTATATAT ATTTTITTTAA AAGGTTTCTT TATCAGCTAC TAAACATCTC AGCAATTTGG TGTGCATAGC  
TCTAGATTAA GCAACAAAGA ATTGTACTGA TAACAAACCA CAGGGGAAAT GGTGGTTAGT AAGAGTCAGC CTTATAAAAT  
TTACATCCAC ACTGTTTCAC AGCAAGATTG CTCTCTCCAA AACGTAGCCA TCAAAAGCAG CAAACAAACC CT

SEQ ID NO:1790: (Length of Sequence = 281 Nucleotides)

TGTTTCCYTC ATTAGCTGTA GACTATCCCC TCTCCTCCCA CCACAWTGT TCTWTGATEA KTTACAAACA GAAAGGAAAT  
CACATTTTCA TACTAAAAAC AAAATGWTCA GAGCCTTGAT TTYTCCACTA GAWACTACAC GTACAGTTAA GAGTCCACAT  
GCAACACCTT AAWTCACAGA CTGAGACCTC ACATTYTGAC CTGGAGNTTC CTCCCCTTCC CCAGCCTTGG GCTAGCTTTG  
GCCTAGGCTC AKGTAATACT GACACCCACA GGCCTGCTC T

SEQ ID NO:1791: (Length of Sequence = 261 Nucleotides)

AGGCAAAGCA GAAAGGTGTG TTTGCCAGAC CAGCATGGGC AGCTCAGAGG GAGCAAAGCA TCCACCAGAA GAGGCTCTCC  
ATTTTTTTGT AGGGCCTGAC AGTTGAGATT TGAGGCTGAG TTAACAWTGG GACCACTGAA CTTTTTTCCA ATGGAAAYT  
CACGGCCCAG TCCCACAGGA ACTTTGCGGC ATACCAAAACA ACAWTGAGGA AGGAAGGGCC GGGTGGCTCT ACCAAACAKT  
TCAGGTCCAC TGGGTGAWTG A

SEQ ID NO:1792: (Length of Sequence = 324 Nucleotides)

CTCCATCTTT ATCGGCTGTA TAAACATCTC TGGTCTGTAC ATACATTTCA TACATCGTAG GGTGGGAAGC GAGGGCCAAA  
GGGAGGCCCA GCAGCACAAC AGCTACCCCG CTTTCCCTAC AGCCCTACCC GCTCTGTGCA AACCAAGGCC AACAGCTCCT  
GCTGCCTCTT CCTCCCTGGA AAAGTCACTG TTATGGGGAG GGGGCCAGGG GTTGAAGGAT TAGAAGGAGA TAGAGGGCTT  
GGTGGGGAGG CCACATNTAA GTCTAGATT CAAACACTGA AGCGAAACAG GCAACTGGCA CAAGCAGCAA GCTTAGGCAT  
GGGC

SEQ ID NO:1793: (Length of Sequence = 386 Nucleotides)

ACTCTTGGGG ACCCAAAGAT GTCAGGTCCC CATACTCTGA GGAATCAGGA CACAGCCCAG TGCCTGACAC CACAGAGTGA  
GGCAGCCCTT CGGGTGAGGG CCTGGGCCCTC GAGGGATGGC AGCCACCACT GCCTAGGCAA ACGCACTGG GGCCTGAACCT  
GGCGCCCGGC ACTTTNAGGA CGCCAGCACC AGTGGGCACT CGGAAGTGCC AGTTCTGGCC CAAATTTGGT GACCTGGGTC  
AGAAGGACCT TTCAGAATGA NTGTGTCCCG TCAGCAGATA CGTCAAGAC ACGGCTGGCT CTGAGAGGGG CTGGGTGCC  
GTTTTCCTG TATTCTCCTG GGGGCCAGCA CGTCTCAGAG GGTGTCCCTG TGGTCCCCG GGGTCA

SEQ ID NO:1794: (Length of Sequence = 308 Nucleotides)

GGATGCTCTT TAAACATGC AAATTGGGCC GGGCAGAGTG GCTCATGCCT GTAATCCCAG CACTTTGGGA GGCCGAAGTG  
GGTGGGTAC CTGAGGTCAG GAGTTCAAGA CCAGCCTGGC CAGCATGGTG AAACCTCATC TCTGCTGAAA ATACAAAAAT  
TGGCCAGGCG TGGTGGCATG TGCTGTAAAT TCAGCTACT CGGGAGGTTG AGGCGGGAGA GTTGTITGAA CCCGGAGGT  
GGAGGTTGCA GTGAGCCGAG ATTGCACCAT TGCACTCCAG CCTGGGGTGA CAGAGCGAGA CTCTGTCT

SEQ ID NO:1795: (Length of Sequence = 418 Nucleotides)

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GAAACGCTAA GGTTTTGACA GCGTTACAGT GAATTCCTCG GCTGTAGAGA TTGGAGGAAG TCGGGAGAAA TTCGTCTCTA  
 AGTTGTAAGG TGGAACAGCA TTCATTTTCT TACTGCCAAT GGAGGTTTTT CATGAATTTA CTAACCTAGT AAAAAGATTG  
 GGCTTTTTTT TTTTAACTTT AAAGGATCAC GCTTTAAACC TCTGTAACAA AGTAATTATT TGTACCACTC TCTACCCCTC  
 CCTCCAACAA AATAACCTAT CGGNTCTCAG AAAATAATAA CCGTTTGCTT GCCTTTGAAA TAGTTATCCT TTTTAGTATG  
 ACAGTGTTCA AAAATTCTTT TCTTAGACTT GTAGCAGAAC ATAGCTATGA TGATCTGAAT TTTTCTCTTT CAGCTTGTTT  
 TAAGACGAGG GGGACTCC

SEQ ID NO:1796: (Length of Sequence = 416 Nucleotides)

CTTTATTACA TATGCAACCT TGCCATGCCT GCCAGTTAAC TCCCCTCCCG CCAATGTTAT CCTCATGATA TCAGCTCCCT  
 CTTGGGGCCA CTGAGCTGCC CCCCTTTCCT TCTGGGCTGG AGTAGTGGTG CCCCTCAAGC AGGCAATGGG CAGGGGGAGA  
 TCCACAATT AATCGTCGAG TTCTCTTAAA AGTATTAAACA CTAAATAAG CACTCTTGGG GAGTTGCAA GGATATTGAG  
 GATGGGATGC AGTGGGAGGC TACCCCTCAT CCAAGGTACA GGCTGGAATG AGCTACAGCT GGGTCTATCG TGGGCTCAG  
 AAGGTGAAGA GGGACCTAT TCTGGGCTT AGTGTGGTG GGCATATCC TCCCCTAACT TGTCTGTGG GCGATGTTCT  
 TCACATCTAG GAGAGC

SEQ ID NO:1797: (Length of Sequence = 298 Nucleotides)

AGGAGGGAAA CCAGAATCAA ACTACTACTT CTAGATGAAC ACAGGCTCTT GAGAGTCCCC AAGAGAGGAG GCTGTGATC  
 CAATCTGAC TCAGACTACC TACCTGGCTT CCTGGCCCTA GGAGGTAATA ATGATAGTNT CAGGGGGTCC ATGTAGCAAT  
 CCAAGCAATT CCGAGGTGA GAGCAAGCAA AGAGGATAGG ATGAAGGGAA GGCAGGCAA GAATGTGCTC CTAGTAAGAA  
 GCAACTCTNT TCCACTCACT TCCTTTTGCT CTNTGGCAGG CAAGTCAACT GGGTTCTC

SEQ ID NO:1798: (Length of Sequence = 245 Nucleotides)

CTGGTCCATT TTTACAACAN ATACATCCAA AACACTATAT AATANNNTTT TTTACAACAT TTCCAAATGA GAAGATTGCT  
 TTINCCCCCA CTACTGCTAT TCACACACAG TACTTCCAG GCACAATACA TTAGGAGATC TAAANITGCT CACCTGTAC  
 TCTAGGCTGC TTAGGAAATG TGAAAACATG NAACATTIAT AATGGCATTG GCTCCTTTCA ATACAAGGCA ACATTTTAGN  
 AACCT

SEQ ID NO:1799: (Length of Sequence = 312 Nucleotides)

GAAATGTTAG GCTAGTTAGA AGGACACGGC AATAGCCTTG AGATTYTCAA CCAGGTTAGT GTATTAGAWG TAAAAAGGAG  
 AGGAAAGATT TGAGAGTTAT CTCAGAAACA GAACCATCTA ATTTTTTTGG ACTGATTGA CTGCTCTTC ACTCATTTTT  
 TTATTCACTC AACAACTATT TTTGAKTENT TTGGATGGGT CAGACATTGC GCTAAGTGAA AAATAGGAAG GTAAGAAAAA  
 GAAGACTCTG AAGATGAATT CCTCCCCAA AACTGAGCTA CTAGCTATTA CTCAGTGGGG CTGAAGTGAC AC

SEQ ID NO:1800: (Length of Sequence = 309 Nucleotides)

GGCATGTGAC ACTAGGCCAC AAGCGATAAG CACAGGCACC TGACTTTTAA GTTTTGTITT GTTTGTTGTT TCCCAAAGTG  
 CTGATAACAA TAACAACAAC AATAGGATTC CAACCAGGNG CCTCAAGTGA CAGCCAGGNA GAGACCTGAA GGTITGGGGC  
 ACCACAATGC CAAATCGTTT CTAAAGGAAG CTGAAAATG GGACTGTCTT TTGCCCACTT CGTTGTGTTA AAAGGGGACA  
 TTTGTNCAA CTNCCCAACC GAGTTCTAGA AGNTCCTGAC AAGGAGGCAG CATCCAGCCT TGACCAGGC

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SEQ ID NO:1801: (Length of Sequence = 166 Nucleotides)

CAAAANTTAC TCTGCAAAT TAATATATGA TTTACCTGCT GTINTCATAA GATTTCAAA TAGACAAACT CGGTATGCTT  
NGGATTTGCT TTACATTCTA AGTGGATTG GAGGTTGAG CAGGCGCCAA GGAGTINAGCC GAAGTTTCAT CANGCGGAGA  
TGTGG

SEQ ID NO:1802: (Length of Sequence = 281 Nucleotides)

GGTGGATGTC TTGCGGCGCA GGATGGAGCC CAGACCCAGT GGTACAGTG TGGAGCTCTC TCCCTGTCCC CTGACTCTGG  
CCAAGGAAGT GAATGCAAAG CAGCAGGGAG GAGGCAGGGT GGGGACGGCC CTCTGAGCTC TCCGCGATGG CTGGCGTGAG  
GTGCGCTCTAA GACTTCTNGG CAGCCCTGCC TTCCCTACTC AGTCTTCCCG ATCTTNTTGC CACCTTCTG TGTGGGCCAG  
NCTCCCGCCA GGTACTCAGA GCGCGCTCAG AGGGCAGGGT T

SEQ ID NO:1803: (Length of Sequence = 429 Nucleotides)

TTACAGTTA TAGTTGGGGA CATTACAAC CCTTCTCAA TAATTGATAG ACTACTAAAT AAAAAACCAT GAAGSATATA  
CAAGAACTGT ACAACTCTGG CCGGGTGTGG TGNCATGTC CTGTAATCCC AGCACTTTGG GAGGCTGAGG CCGGTGGTTC  
ACTTGAGTTC AGGAGTTGGA GACCAGCCTA GCCAACATGG CGAAACCACA TCTCTACTAA AAATACAAA AAATTAGGCT  
GGCTGTGGTT GGCCTTAATGC CTGTAATCCC AGCACTTTGG GAGGCCAAGG TGGGCATATC ACCTGAGGTC AGGAGTTTGA  
GACCAGCTG AAAAACATGG TGGAAACCA TCTCTACTAA AAATACAAA ATTAGCTGGG TGTTGTGCGT CTGAAAAAAT  
TAGGTAACT CGTCTCAA AAATAATA

SEQ ID NO:1804: (Length of Sequence = 278 Nucleotides)

GACCTGAAGC TCAAAGTCTC TCTCCTTACA CAACCAGCGN CAACAGGGCC AAGCTACTGG CTAAGAACAG ACAAACTTTC  
CTGCTTCAGA CCACAAAGCT GACCCGTNTT GCCAGACGCA TGTGCAGGGN CCTNTTACAG CCAAGGAGGG CCGCCCGACG  
GNCCTATGCT CCTATCAATG CCAATGNCAT CAAAGCAGAG TGCTCCATTC GNCCTCCTAA GNCNGNCAAG ACTCCATNA  
AGATTCACCC TCCTGGTGCG GCTGNCCTG GGAATAT

SEQ ID NO:1805: (Length of Sequence = 349 Nucleotides)

GCATCCATGG CGGAGGGCGG CAGCAGCAGC GCGGGGAGG GCGGGGCTCC GCAGGTGCTA ATCTGAAGGA GTGGCTGAGG  
GAGCAATTTT NTGATCATCC GCTGGAGCAC TGTGAGGACA CGAGGCTCCA TGATGCAGCT TACGTGGGG ACCTCCAGAC  
CCTCAGGAGC CTATTGCAAG AGGAGAGCTA CCGGAGCCGC ATCAACGAGA AGTCTGTCTG GTGCTGTGGC TGGCTCCCT  
GCACACGTT NCGAATCGCG GCCACTGCAG GCCATGGGAG CTGTNTGGAC TTCTCATCC GGAAGGGGGC CGAGGTGGAT  
CTNGTGGAGC TAAAAGGACA GACGGCCCT

SEQ ID NO:1806: (Length of Sequence = 403 Nucleotides)

GTGCAGTGTG GCCAGATCTT TTCTAGTAAA ATGTGTGTTA CTGATGGGCA GACAGCTCTC ATTCAAGCAG TGACAGATGT  
AAGCNCCTCC CATTTTGTG GCCCATGTG ATTCAGCGTG TGGCTTCCAA GTTGCTGGG ATCATCTCCA CCCAGACTAA  
GGAAGAGGAA AGAGCTTGGA CACTGCACT TGGCTGGTTT TNATGGATCA GGCAAGGAAT TGGCTCCAAC ACATTAGCTC  
ACATTCATT GGTAGAACT GGGTTTCTCA ACTATAGTA CAGGTTGAGT GTAGGGTTT GGCAACATGG GCATTTGAGC  
TGGCCAAAGG CTAATCAGAG TTAGAACAAA GCCACAAAGC CTGTGAATGG TGTATTATTG TGTGAGGAGC TGTCTTGTGC  
ATT

SEQ ID NO:1807: (Length of Sequence = 426 Nucleotides)

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GTCTCAGCT TCACTCTGGC ACCACTGTGA GCACCGGAA ACCTACCAGA AGTTGCTGGA GGACATCGCT GTCTGCACC  
 GCCTGGCTGC CCGCCTCTCC AGCCGAGCTG AGGTGGTAGG CGCCGTCCGC CAGGAAAAGC GCATGTCGAA AGCAACGGAA  
 GTGATGATGC AGTATGTGGA GAATCTAAAG AGGACGTATG AGAAGGACCA TCGGAGTCA TGGAGTTTAA AAAGCTTGCA  
 AATCAGAAIT CAAGCCGCAG CTGTGGCCCC TCTGATGGGG TCCCTCGCAC GGCACGGTCC ATGTCCCTCA CGCTGGGAAA  
 GAATATGCCT CGCCGGAGGG TCAGCGTTC TGTGGTTTCT AAGTTTAATG CCTGAATCT GCCTGGGCAA ACTNCCAGCT  
 CATCATCCAT TCCTCCTTAC CAGCTT

SEQ ID NO:1808: (Length of Sequence = 431 Nucleotides)

GGTACTTTTC CATTAGATT CAAATGGAGC TAAATTAAG AGTTTTATGA GCTGTTAAGA ATGAGGTAGT TTCTCCTAGG  
 ACCCCCCAAA GACAGTGCAA GTAAAGACCG TTGNNCTC ATTGCTCGAT CTTGATAGT ATGINCTGGA GTCTACTCCC  
 CAGGAGCCAG GACAGGCGTG AAGATGGAGT CCTGTGCGCA GCTGGAGCCT TGCCTAGCTG GTGATCACAC AGCCTGNC  
 GTACCTGCAC CCCACTGGAT GGTGGTACAT GGTGGCAGGG ACAGGACCAC ACCCAGTTAA GGCCAGACCA GGCTGAGTGT  
 GACCCCTGAG GTAAACACTT CACTAAGCTG TGTCTTGTTC ATGCCCCCTG CTCAGTGAAA GGTGAGTCCC GAGACCAGTT  
 GGGTACCTCT CTTATGCGAA CCAGAGACAT T

SEQ ID NO:1809: (Length of Sequence = 401 Nucleotides)

CGTGAGGCCT TGAGCACAAG TGCAAGCGGG ACATCCTGCT CGGCCGGCTC CGGAGCTCGG AGGACCAGAC CTGGAAGCGG  
 ATCCGGCCCC GGCCCACTAA GACCAGCTTC GTGGGCTCCT ACTACCTGTG CAAAGGAGGA GATCGACGTG TGGACCGAGG  
 AGCGGAAGGG CACCCTCAAC CGGACCTGC TCTTCGACCC GCTGGGGGGT GTTAAGCGCG GCAGCTCACC ATCGCCAAGC  
 TCCTGAAGGA GCACCAGGGC ATCTTCACCT TCCTCTGCGA GATCTGCTTT GACAGTAAAC CCCGATCAT CAGCAAAGGC  
 ACCAAGGACT CTCCGCTCTGT NTGCTTCAAC CTGGGCTGCC AAGAACAGCT TTTTACAACA ACAAGTGCCT GGTGCACATC  
 G

SEQ ID NO:1810: (Length of Sequence = 233 Nucleotides)

AAGTGCTATA TTCATTGTAT TATAGAGAAG GTTGGGGAGC ACAGAAGAGG ATCAACCCAG CTTTGAAGG ATTAGAGAAA  
 GCTTCCAGAG GGTGGACAT TTGAGTAGC AAGAAAGCAC AAGGGAAAAG GCATTTAGAC AGAGGAGACA ATTTGTCTCT  
 ACCCAGAAGC ATTGGGGTAT GCTATGCATG GATAGNCAA GAATTTTTC AAAAGGGGG CCAGCAAGGC ATT

SEQ ID NO:1811: (Length of Sequence = 423 Nucleotides)

CAAAGAAAGA GTTGAAGTAT GTACATTGAA AAAAGGAAAG ACATTTTTC ATACCAACCT TTCCCTAGTT CGCAGTTTCT  
 GAATAGTAGA AACAAAACAC ATTTTAAAT CTTTCTATCA ATTTAATTTA GGACGAAGTA ACACAACTTT TATAATTAA  
 CACTGAAGTT GTCTTTAAGG ACAAACTTA AATTTTAAAA TGGGTGTTAC CATATTNAT GAGTGGACTG ACTCCAAGGT  
 TGCCITGCTC CAAGNNTGGG CATCGTGACA TTGCGTGAT GCCCAGAAGA AAGTTAATGG CAATGATGTC CAGTCAGAGG  
 GCAGACATGC TACACATCAC AATGATGAGA GCTGCGGGAT TCTGCCCTCT TCAACTTCCA AGTAGNAAAT TATTATTTTC  
 CATCAAACT AACTGGGAGT GAG

SEQ ID NO:1812: (Length of Sequence = 394 Nucleotides)

GACCAGCCTG GCAACTTAGT GAGACTCTGT TTCAGGAAAA AAAAAAAAAA GTGTATTTGG CTGTTCTGAA GCAGGCCATC  
 ATCACCCCTC ACCTCACCCA CAGGTGGCTC TCGGGGGCTG GTCCATGGGC GGCCTGGCG TNAGGATGGA GTCCTAGCTG  
 TGACCTGTGC CCAGGAGGGC GTGATCCGAG TGAAGCCCCA GGTCTCAGAG AGCAAGCTGT AGCCAGAGGT ACCAGCTTCG  
 CCTGGGGCTT CAAGAACCTC CCATCTATCC CCAITCTGA GACAGGAGTT ACAGTCCCTT TTGNCCTINA CATCCAATAA

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AGAGACTGAT ACCACTGGAG TGGCTGGCTT TTAATTCCCC TGGGCCAGAC CTGCAGCCTT GCCTTAATCC TTAA

SEQ ID NO:1813: (Length of Sequence = 344 Nucleotides)

CATCAGCGAC AGGTCTCCCT CCCAGAACCC CATCAGGACA GGAGAAAAGG CAGCAAGAGA GGTGGGGTGG TCCTGGCAGG  
TGGGCCACCA GTNTCTGAA TGAAGAGTGA GTCCCGGGT AGGAGTCCAC ATCAGGTGTG GGCTGCTTCC AATCTGTAGG  
TCTCCTGGA GATTNACACA ATCTGCCAGC TCTCTGGGAA TCACAGAACC ATCATGTCCC CTTAGGATGG CAGAAGATGT  
GGCACAGCCT CAATCTCCAA CACTGAAACA CTNAGAGAGC TTGATACGTT CCTTAGGCAG GGCAGAAACA TCACAGCACT  
TCACGNTAGG AACCACGAAA GAGT

SEQ ID NO:1814: (Length of Sequence = 442 Nucleotides)

GACACAGCAG GCCCCTGCCC CTGAAGGAGA CTGCATTGGA ATTTTGTCCA GGTGGCCCTG ACACATAGGA ATGCCCACT  
ACTGTGACTA CCTCTGAGA TAAAAAGCTG TCCTACTGAT TTTAGAAGGC CAAAATTAGA GGTCAATTTG GAGGTCATGC  
CAGTGGACAT ATAACAGTTT GAAATGCTTG TTCCCGGTG CGTAAAGAA ATAGTACTTG AACTTAAATT TATTACAGAA  
GGCCATTTT ATTTCTGCA GAAAGGTAC ACTTGGCAGC AGTTTINCCA CGAGAGTACC CCGAACAAAG GAGACAGGT  
CATTTATAAC CTGACGCGTC CACCTTCTG CTGTGTCGGG TTTCATTGG CTGGAACAGG ACCTCACATT CTGTATTGT  
CCCGATTGGC TAGCACTTA GGACTTATTA AAAGAGGCAA AG

SEQ ID NO:1815: (Length of Sequence = 299 Nucleotides)

GCAGAGAATC CCTTGAACCT GGNAGGCGGA GGTINCAGTG AGCCGAGATC ACGCCACTGG ACTCCAGCCT GGACAACAAG  
AAGGAACTC CATCTCAAAA AAAATTGAAA AAAAATTCAN GANATACAGA ATGCAAAANG GGACCAAAA AGTACCAAAA  
ATTTCAAAT TTTGTTAAAC TGTACCAAT CTGNTACGA AGCGTTATTT TTGCCACAG GGCATTCCC TGGAAAGNCG  
TTACAATAGC TNAGGCTTCC TCTTCAGATA GANTTAGAGT GGCAGTAGGA TAGGCTCTT

SEQ ID NO:1816: (Length of Sequence = 286 Nucleotides)

ACCCCGGGT CCAGGTATGC TCCACCTCC ACCTGCCCCA CTCACCACCT CTGCTAGTTC CAGACACCTC CACGCCCCC  
TGGTCTCTC CCATCGCCA CAAAAGGGG GGCACGAGG ACGAGCTTAG CTGAGCTGGG AGGAGCAGG TGAGGGTGG  
CGACCCAGGA TTCCCCCTCC CCTTCCCAA TAAAGATGAG GGTACTAAAG TTGTCTTGGT TTTTATTTTA TTATTATTTT  
TTTCTTTTC CAGTATACTA GCTTGTCTT TAAGAAAGGG GATATT

SEQ ID NO:1817: (Length of Sequence = 320 Nucleotides)

GAAAGGAAGG CCAGGGTGG AGGAAGGATC AGCTAAATCT GAGGGAAGAA GAAGGAAAGG AGAGGGACTA TTGCATAGCA  
GATGCAAATG AAGGGACTGT CTTATTATAC AGTTTATCA TCTGTTAATA CTCATAATCT TGTTCTTTT TCACTTTTA  
TATAATTTTA TCTTTACATT AGTTAAATCA AAAATCTTAA AACACATTTT AAACGTGGTC ATAGGTTACT TTTATATATT  
ATTGAATTTA TAATAACAT GTTCTTTNC TGGAACTGG GATGENACCN CGATGGTGT TCTTGAATAT AAGAGTGTCC

SEQ ID NO:1818: (Length of Sequence = 356 Nucleotides)

CCCAGGAGGC TGAGGCAGGA GAATCGCCTG AACCCGGGAG GCAGAGGTG CAGTGAGCCG GGATTGTGCC ACTGCACTCC  
AGCCTGGTGA CAGAGCGAGA GTTCATCCAG ACACACACAT ATATATATAA TTNCCAAACA GGCTTTACTA AACCCCTGA  
GGTCTCATGA CACAGTAGAA AATCATGATT TAGTAGAAG AGCATGGTCG TAGGAATCCA GTAGATCAGT AGACCTGAGT  
TAGAGTCCCA AATCTGCCAC TTTCAATCTG TATGGCTCA GGCAAGTTAC TTAANCTTTC TGTCTCTCTG TTTTCTTTAT  
AAAATGGGGG ATAATAATAG TAACCTCTC ATAGG

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SEQ ID NO:1819: (Length of Sequence = 328 Nucleotides)

CCACTCCTGT AACCTGCTGG ATGACTCTGC ACTGCCCTTC TTCATCCTCA CCAGTGTCTT GGGTATCCTA GCTAGCAGCA  
 CTGTCTCTTT CATGCTTTTIN AGACCTCTCT TCCGCTGGCA GCTCTGCCCT GGCTGGCCTG TCCTGGCACA GCTGGCTGTG  
 GGCAGTGGCC TCTTCAGCAT TGTGGTGCCC GTTTTGGCCC CAGGGCTAGG TAGCACTCGC AGCTCTGCCC TGTGTAGCCT  
 GGGCTACTGT GTCTGGTATG GCTCAGCCTT TGNCCAGGCT TTGCTGCTAA GGGTGCCATG CCTCCCTGGG NCACAGACTG  
 GGTGCAGG

SEQ ID NO:1820: (Length of Sequence = 359 Nucleotides)

CCACCATGCT CTGCACTCGC NCTGGTACCA GGCCCGGAC CTCATGCTCA TGAGCCACTT GCAGGACAAC ATTCAGCATG  
 CAGACCCGCC AGTGCAATC CTTTACAACC GCACCATGCT GCAGCTGGGC ATCTGTGCCT TCCGCCAAGG CCTGACCAAG  
 GACGCACACA ACGCCCTGCT GGACATCCAG TCGAGTGGCC GAGCCAAGGA GCTTTTNGGC CAGGGCCTGC TGCTGGCAG  
 CTTGCAGGAG CGCAACCAGG AGCAGGAGAA GGTGGAGCGG CGCGTCAAG TCCCTTTCCA ACTGCACATC AACCTNGAGC  
 TGCTTGGAGT TTGTTTTTANC TGGTGTCTGC CATGTTCTT

SEQ ID NO:1821: (Length of Sequence = 208 Nucleotides)

CCTGGGTCTG TGACCCAGAG TTCCAACACA AAGACACTTT GACTGGAAC GCTGGAGCCA TTCCAACATG AACAGCAAGA  
 ATAGAACCCTG TGCTGGCTGG TCTAAGATCA AACCTCGNGA TGGTGGTTTG AAGTNCCTCT TCAAAGAAAG CTTGAAAATG  
 AAATCTCAGT TAGGCAAGNC AGATAAAAGC AGAGTTATTG TGGTGGCG

SEQ ID NO:1822: (Length of Sequence = 314 Nucleotides)

GGATGINTTG AGCCAGAGTT TAAGCCTGAC ACACAGGCTT TGGTCTCTAC TGAGCTGTCT CCAAGACTGG AACTACTTAG  
 TGACTCGGCA AATTTTCTGC CCCCCACCCC TCATCAAAGC TGCTAGTTCA GATGTTGACA GTGTTTTCAT GAATGTTGGA  
 ATCTTACTAG TCCAGACTTA CTTAGGATGT TGTGGGGAA GGCACCTGGG ATTTTCTGTG TCTTGCAATC ACAGAGGGAG  
 GCCATTTCAG ATTCAAGAGC ATTKGATTAG GGGATCGTGA GGCAGGGATG CTACTGCGKA TTTCTCTCTT CAGG

SEQ ID NO:1823: (Length of Sequence = 344 Nucleotides)

AACAATTTTG TCTTACTAC ATCTTAAAGA ATTAGAATTT GGGTTGGTGT AAGTGACTTA CTTCCAGGNN ATCATGCTCT  
 ATTTCTACCA GCAGGTCAAT CCNAAATGTC ACACTATCTA TTGTTAACCA TGAATENTAT TCAGATCTAT TACTTTTCTG  
 GAAAAGTGGG ACATGTTACT TCCAACCATG GCCTGTCAAC GTGAGTGTGA TCANCTTNT CCAAAACCAC ATGGGTGCGA  
 GGAGCTAAGG GGTGGTACCC MAATGTTAGG GACAGTGTGA GGGAGGGCA AGGGAAAAGA AGTGACTNGA TGTCTTATGA  
 GRAACCGTA AATGGCTTAA AAAA

SEQ ID NO:1824: (Length of Sequence = 340 Nucleotides)

GTGAGTGGCA GGTATCATGA ACCACATTGT GGACCTGGAG TTGCTAGGAC CTTTCTGCCC ATTACACAGA AAAATCCTCC  
 CTGAGAACAC AGCCATTNGA GGNACATGG CAGAGGAAGA TAAGACAATA AACAGAGNCA CATAATTATG GCCAGCGTGG  
 GGGCTNACGG CTGTAATCCC AAAACTTTNG GAGGCCGAGG TGGGCAGATC ACCTAAGGTC AGGAGTTGGA GGCCAMCCTG  
 GGCAACATGG TGAAACCGT CTCTACTAAA AATACAAAAA TTAGCCSGGC GTGGTGGCAC GGGCCTGTAG TCCTAGCTAC  
 TCAGAGGGTT AGGCAGGAGA

SEQ ID NO:1825: (Length of Sequence = 357 Nucleotides)

AATTTGGTTG TGGCCAAATT CTCAGTCCAA TCACCCTGGC CCAGGGCCTG GCGTGGGAGG ATGTGGCAGG CTCGTCTCC  
 TTCGGGGT CCGGTCTGG AGGAGTCTCC CCAACAGGC CAAAGCTGGC TGTTTTCCGC CCAAAGCCCC AGAAGTTTGA

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ATGAGAGGCA AATCTACCCT GAATGCACCT CCTCTCTAGG CTGGGTGAGG TCACGCAGAC ACAGAAGGGC AGGACAGAAC  
TCCCCATCTT CTGGGGGCCA ATTCTCTGAG AACTGTGCG GTCCANCTTCC TTTTAAAGT GCCAGTATCG GTGGGGCAGG  
AAGGGACTCT CAGGGCTGAG CAGAGCCTTC TTCAGCG

SEQ ID NO:1826: (Length of Sequence = 207 Nucleotides)

CCGGCCCCCTT CAGTCCCCAG CCCCTGCCCC AACTCCGACT CTGCAACCCA GCGCGGCTTC AGCCCCGATT CCGACTCCCA  
CCCCGGCACC AGCCCCTGCC CCAGCTGCAG CCCAGCCGG CAGCACAGGG ACTGGGGGGC CCGGGGTAGG AAGTGGGGG  
GCGGGGAGCG GGGGGGATCC GGCTCGACCT GGCTTAGCC AGCAGCA

SEQ ID NO:1827: (Length of Sequence = 309 Nucleotides)

GTGTGCGCCT GTAGTCCCAG CTACTCCGCA GGCTGAGACA GGAGAATCGC TTGAACCCCTG GAGGCGGAGG TTGCATTGAA  
CCGAGATCGC ACCACTGTAC TCCAGCCTGG GTGACAGAGC GAGACTCCAT CTATAAAATA AAATAAAATA AAATAAAATA  
AAATAAATAA AATAAAATAA AATAAAATAA AATAAAATAA AATAAAATAA TAAATAAAAA TAAATAAAAA TAAATATAA  
AATAAAATAA AATAAAATAA GAACCACCAT ATGANCAGC AATCTCATTG GTGAGTATAT ATCCGAGGG

SEQ ID NO:1828: (Length of Sequence = 382 Nucleotides)

ATCTCTGACC ACCCCCTCCT CCCCATCCCA CCTTTGGTA ACTCCCCCGC CCAGGNCATC GCCCAGATAT ATTCTTCTCC  
TTGGGCAAGA AGTTCTGTGC ATGCAGGTCA AATCTGAAAG GGNCAATTTCT TTCTTTAATG AGTGTCCAGG ATGGGGGATG  
TGGCTGATGA TATAAGGGGC CCTCCAATCA GACTTTCTAA TCTAACTGAA AAGNTAATTA CAATGTTGAT GCTAAAAAAG  
AAGGTTCTGG CAAAATAGAA CTTCTGAAGC ATCATAAATC AGATGACTAA TATTGTGAT CCCCNITTAA ATTTTCATGT  
GAAGAAGAAT AGGGGATGTA ACTGAAGRAA TGNACTAAAA GTTCTTCTAT GTATTGATAA CC

SEQ ID NO:1829: (Length of Sequence = 361 Nucleotides)

GGCGCGCCT CTGGAGCTGG ATGTCCAGGC TGCGGCGCT GCTGGGCTC GGGCTGCTGG TTGGGGGCTC GCGCTGCCG  
CGGATCAAAA GCCAGACCAT CGCCTGTGTC TNGGGACCCA CCTGGTGGGG ACCNCAGCG CTGAACCTCG GTGGCCGCTG  
GGAATCAAAG GTCATGCGA GCACGGTGGT GAAGTACCTN AGCCAGGAGG AGGCCAGGC CGTGGACCAG GAGCTATTTA  
ACGAATACCA GTTCAGCGT GACCAACTTA TGGAACTKGC CGGGCTGAGC TTTGCTACAG CCATCGCCAA GGCATATCCC  
CCCACGTCCA TGTCCAGGAG CCCCCCTACT GTCTTGCTCA T

SEQ ID NO:1830: (Length of Sequence = 180 Nucleotides)

AAGAACGTG GCTGCCTGCA GGAGGCGCTG CAGCTGGCCA CTTCTTCCN CCANCTGCN CTCGGGATG TAAAGAACTG  
AGTGGGAAG GAGGAGGCTC CCACTGGATC CATCGTCCA GCCAAGAGCT CTTCTCTGC TACAAGAACA TTTGAATCTT  
GGGACCTTTA AAGAGCCCT

SEQ ID NO:1831: (Length of Sequence = 335 Nucleotides)

AGATCTTCTA TATTCGACT ACTGATTCAA ATGCTAATCC TGGACGGCA TGGTGGCTCA CACCTGTAAT CCCAGCACTT  
TGGGAGGCTG AGGCTGGTG NTCGCTGAG GTCCGGAGTT TGAGATCAGC CTGGCCAACA TGGTGAAACC CTGTCTCTAC  
TAAAAATACA AAAATTGCT GGGCGTGTG ACATGCGCT GTAATCCAG CTACTCGGA GGCTGAGGA GGACAATCAC  
TTGAACCCG GAGGCAGAGG TTGAGTGAG TTAATGCACC ATTACTCC AGCCTGGTG ACAAGAGCGN AATTCATCC  
CCCCACCAA AAGCG



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SEQ ID NO:1832: (Length of Sequence = 337 Nucleotides)

GTATTGTGGAG ATGGGACCTT TGGAAATGCT TTGATTAGGA AGAAGGAGCT TTCATGAACG GGATTAGTGC CCTTATAAAA  
 GAGGACGCAG AGAGCTCTCT CACACCTTCC ACTGTCIGAG GNCACAGGGA GAAGGCCCTG TCTATGAACC AGGNAATGAT  
 CCCCACCAG AACACCTTGA TCTTGGACTN CCCAGATGCT CCANATCINT GAGAAGCAAA TTTCTGTGCT TTATAAGCTA  
 TCCAATGTAT GGAATTTTNG TACAGCAGCC CCAACAGACT AAGTATTAA TAAAATAAAG ATGTAAGATC TCTGTTGAAA  
 ATGCACAAAT AATATCT

SEQ ID NO:1833: (Length of Sequence = 244 Nucleotides)

TCTCTCATTG TAAGCACAAA TTGTTCCGIG TCTGGTTATT AAAATCGCTT TGGGTCTATA ACAGCCACTC TTGTCCCCC  
 TTTTAAATAGA AAATGTTCAT TCTAGCCTGG ATTCTCCCC ACTGGAGGTG GAGGGTGGGA AGAGAAGGGA GTCAGCTCTG  
 ACAGCTTACA AACTGGGAAG TTCTGTGCAT CTCCAGGGAT TCCAGAGTTG AAGATCTGGT TGTGGAAGC TGGGCGCCCA  
 GTGC

SEQ ID NO:1834: (Length of Sequence = 322 Nucleotides)

TCCTGTACTA CACCTTTGCC AACATGGCCA TGTGAACCA CCTGCGCAGG CCCCCGTCTT GCAGTACCTG TACTACCTGG  
 CCCAGATCGG CATCGCCATG TCTCCGCTCA GCAACAACAG CCTCTTCCTC AGCTATCACC GGAATCCGCT ACCGGAGTAC  
 CTGTCCCGCG GCCTCATGGT CTCCCTGTCC ACTGATGATC CCTTGCAGTT CCACTTNACC AAGGAGCCGC TGATGGAGGA  
 GTACAGCATT GCCACCCAGG TGTGGAAGCT TCAGCTCCTG CGATATGTGT GAGCTGGCCC GCAACAGNGT GCTCATGAGC  
 GG

SEQ ID NO:1835: (Length of Sequence = 178 Nucleotides)

ATGAAAGCAC AAAAGAAGTC TATCAAAATT ACAAAACTT AAAACCGAGT AAACAAAAC TCAAGAAAGAA TGAAAACAAT  
 TGAAAATAA CTCAAGAAA AAAATGTAAA ATGGAACAA TACAAGANCA ATTTGTGCCC TCTGAAAAAC AGAGGTTAAA  
 GTCAGATTT TTTGTNC

SEQ ID NO:1836: (Length of Sequence = 377 Nucleotides)

CGCTTGNAC CACACCCAGC TAATTTTGT ACTGTTAGCA GAAACAGGT TTCATCAGT TGGCCAGGCT GGTCTOGAAC  
 TCTGACCTC AAGTCACCA CCTGCCTTGG CCTCCCAAG TGCTGGGATT ACAGGCATGA GCCACTGTGC CCGGCCTTTA  
 TGCTGAGTTT TAAGGGCTGT ATGAGACACC AGGTGGTGGG AGGGAGCTGT TTTGAGAGCA GGAATTTAG GATACTTAGG  
 AAATTAGAAA ATTAGAGAAG TCATAGGATC TTGGAACATA GGGAGAACCT TAGAGTCTG TGGAGCAGAA CCCAGCATTT  
 GTATGTGGAG GAAACGGAGG GCCCAGAGAA GTTGTGACTT ATNCCGGGT CAATCTT

SEQ ID NO:1837: (Length of Sequence = 388 Nucleotides)

GGAGAGAACA AACCTCTTA CTGGCCTTGG GCCCATCCCT CTTTCTCCA CACTGCTACT TTTGAGTTAT CTCATTTTGC  
 TCCCAATAGT CAGCCTTGAC TTTTCTGGGC TTACCTGGGC ATCAGGGACC CATGTTGCAC ATTCAGTTGT CCGATTATG  
 TCTGCCTTAG AGCGTCTCCT AGGGCAGCCA GTCTGGAACA GTCAGTCACC TAGGGTCTG GAGCTCCTGC AGTCTGCCAC  
 TGCTINCTTC TGCCTGATAA CAAATACTAT TCCTTTTATC CTTGCAATC GACCCAGAAA GAGGTGGCTG TCAATGTCCA  
 AGGCCCCCTG GAAACGAAG ACTGGAAATN TGAAACCACT GGGCACAGG GGAATGGGTG GGTCTGAG

SEQ ID NO:1838: (Length of Sequence = 369 Nucleotides)

TCTCTTTATG CCAACAATTA ACTGGGAGCT AGGTTAAATT ATTTGGCTAG ATAAACTAC CAGCTAGATG GATTIATTTG  
 GTGCCCTCAT ACAGAATGCT GTAGAAAATG TAAAGAAGAG AAAGCTCCTT CCAGCTAGAA GCACATGGGA CTGCTTCTAG

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GATGGAAACA AGTCTGCTA TTTTCACAAT CCTAAGNGT TCTCCAGGCC TCTGGAGAAC AAAGTAAAGT TGTAAAGATCC  
 CCAAAGACAC GGAAAATCCT GGACGAACAG ATTAGAAATA ACTACAAAA ACAAGTTTTT TACTTTTGGAA AAGGGTACTG  
 CACTGAAACC AAGTTGGACT TTTGGTCCAC CCCAGGGCC CTCTTCAGG

SEQ ID NO:1839: (Length of Sequence = 359 Nucleotides)

CNNGTAGGGA AGAGGACTTT ATTGGGATGT TAGTAGGGAA ACATGAGAGG GTGAATTCCA GGAATAGAC ACTAGGACCA  
 AGGTGGCGGT CACCTTAAAG AGCCATAAAT AAACTTAAAA AATTAAAGTG AGGAGGTGCC ACGTGGGGAG GCTGCTGGGA  
 CTATCTGGGA ATTCTTAGGG ATGGAATTTT GGAATTGGAA AGGGGAAATA AGAATTTCCA GCCGTINTCAC AAAAGGGTGT  
 GAAATGATCA CTTCAGACT CCTGCTGCC CTAGGCTGGG AGTTGGGGTT CTGGGGCTCC AGGAAGAGGG GAGGTCTGGG  
 CTGGGCTTNA AGGGGTGAAG AGGGCCCGGT CAAGGTCTG

SEQ ID NO:1840: (Length of Sequence = 360 Nucleotides)

CCAATGAGCC CAGCCTGACA CATATGGACT GCTCGACAGG TCCACTGTCC CACGAGCAGA AGCTGTCACA AAGCTTGGA  
 ATTGCCITGG CATCCACCTT TGGCTCTATG CCTCCTTCA CGGCACGGCT GACCAGGGGA CAGTCCAGC ACCTTGGCAC  
 AAGAGGGAGC AACACTTCTT GGAGGCTCG CACGGCTCG GAGCAGCTG GGAGCATCCT GGGCCCCGAA TGTGCTCTCT  
 GCAAAANAGT ATTTTINTCC TACTTCAAAA AGGAGCCGGT GTACCAGCTG CCTGCGGCC ACCTCCTGTG CCGNCCCTGC  
 CTGGGTNAGA AGCAACGGTC CCTGCCCATG ACGTGACAG

SEQ ID NO:1841: (Length of Sequence = 332 Nucleotides)

GTGTGATTCC ATTTATATGA AATGTCCAGA ACAGGGAAAA CCTATTNAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT  
 GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TGATTGCTTC ACGGGTGAT GACAGAATGT TCCAGAACGT GACAGAGGTG  
 GTGCCTACAC AACTTTCTGG ATGTACTAAA TGCCGCTGAT TGTTCACTTT CAAGTGATTG ATTTTITAGGT TATTTGAATT  
 TCATCTCAAT TAAAAAACC AAACACGCA ACTGCTCCCG CCAGCTTCAG CCCCAGGCA GACGGGCGAN CCGTGGGAGG  
 GATGCTGAGC CA

SEQ ID NO:1842: (Length of Sequence = 246 Nucleotides)

GCTGGTCAAG GCAGAGTTA CTGAACNIN AGTTTCTCC TGCACACACC GGGCATGACA CCTTCAAGTC TGNCAGCAG  
 TGGGTCCAGA AAGTACCCTG TGTGCTTGG ACGCAGAGGC TACAGTTCTN ACTGTGTGGC ATGGGAGCCT TCANAGTGCC  
 CTCGGGAGCT GCCCCGTGTC TTTGTCTGNA AAGGTGACTG GGAGGNTAGA AAAAGCAGCG GGCTGGCATT GTTTCGGGGG  
 TGGGGT

SEQ ID NO:1843: (Length of Sequence = 313 Nucleotides)

ATTTATTGCA AACAAAATTG AGGTAAAAGA AGCTGACCCA GAACCCACGC CCGTCCAGGC TGGGGAAGTC TCTACTCGCC  
 CCACACCAGG CCCCAGCAC CGCGGGCCCG AAGCAGCCCC CAGAGGACAG ACGGGCCCTG CGCACTGAGG TAGCTGCATC  
 TTAAGCCCCC ATGAGTACAA CTGCCCAGGG CTGCCCAATT CCCAGAGGGG AGGAGGAGAG AGAGGCAGGC AGGGGGAGCC  
 COGGCTTCAG GTGGGGCACA CCCCANACCC TCAACAAACC TTCCAGCCTC TTGGGGCTGG GGCATTCTCT GCC

SEQ ID NO:1844: (Length of Sequence = 274 Nucleotides)

CTTCGCTTCT NAAAACCAAA CTCAGCCGC TGCCAGTCGG GACTTGGTGG CCGNCGCTG CCAGAATGCT CCACTGCCAG  
 CCGGCCCCC TGCCCTCGTT TCCCTTCTGT TTAGTGGGGA CACAGGCACC CAGCTTGGG GTGGTGCTGA CGCTCCAGG  
 GGTGCCAGGA GCCACTGGGA CAGGGTGAGG CTCCAGACG CTCCTGAGG TGCCAGCTC TCCAGGGAGC TTCTGNCOA  
 AGGNCCTCTG AGGGATCTGC TCCTTAACCN CCA

SEQ ID NO:1845: (Length of Sequence = 441 Nucleotides)

GGGGAGGGGC GCACACACGA AGGGAGGTGT CAGCCGGGAC CGGAAATCCA ACACGGCAAA GGAAAAAAA CACAACCCGT  
 TTCCCAAAGG GAGGAGCAGC AGGAGACGAT GAAGAGAAGG AACAGAACTC TCTGGGCAAT TCTGATGTAC ACCCAGGTAC  
 AGTGGGGATC TCTTCACTTG ATGCCCCAAA AAAGGGATAA ACAACAAAA AACGTGAGCA GCCAGCTTCA TTCTCTTCTC  
 TGCTTTGTCT CTGCCAGTG ACTTTGGGTT TTGTGTTGAA GCTCTCTTAA TTCTTTGACC TTGAAGTTCC TCAACATCTA  
 TCCAGTAGC CTCAGTTTCC ACTTTGCTTC AACTAACATC TTGGACTTTT TTCAGTCTTG AACAAAGGCTA AACCTTTGAG  
 ATCTTGAAGT CGGACTTCAG CCTACTTAGC TTGATACTAC C

SEQ ID NO:1846: (Length of Sequence = 255 Nucleotides)

ATGAATTCAT TGTGTATTTA TTATTCACAG TTAATCACTA CCTACCAAAT GCTATCCGCA GAGTTAAAGG ATTAAGTACA  
 TAGGTCTTTA TTAAACACT GATTTTTTTT TTAAATATA TACACAAAA ACTTAGTTCA GCAAGGCTTC ATGATATACA  
 CCAATTCCAA AATAAAACAA TCAATGGTC CNGGNGTAGA ATGCCAGATT CCTTTTATCA TCTGCGAGGA AAAGAGAAGC  
 AGGATGAGGA AGAGT

SEQ ID NO:1847: (Length of Sequence = 311 Nucleotides)

CAGGGCACAC GCAGGACCAC TGTGGATTAG AAACCCAC ATCACTCG CAACATTTCCT CCCACATCCA CATCCACGAC  
 GGAGCCAAAT CTCATTGTIN ACCCTCAGTC ACCACCCC CATGGAGC CACTGGTTAC GNCATGGATG ACAGGTGTCA  
 TGCACAGGGA GAGAATTINT CCCCAGTAC CCCTGAGG AGGNCAC CCCCAGGCTA GGGTGGGAGG ATTTAGAGCA  
 GTGCAAGAAA CCAAGGAGGA TGGAGCATCC AAAGGAAGC AGGCAGGC TNGGGGATTG AGGCAGGAA GGGCT

SEQ ID NO:1848: (Length of Sequence = 311 Nucleotides)

CCACTGGCCT ACATTATAGA AGTGTGTAT GCGGACCCTG CCATTGTCTAT CATGGACGCA GGCCATGACC ATCATCACCA  
 CCCATTTINT TGTCTGAAGA GAATCCAAC GCTACCCAAC CATCTGTGTC TGCACTCAGC TCAAATTCTA CATCAGCCCC  
 TATCATCCGG TAGCTGAGGA AATAGTCACA GGTCTCTGCA TTACAGCCTG GTTTGCCATA TCTAAAGCAT CCCTTAGTTT  
 TTCCACAGTC GTCCACTTTG ATTTTGGCAA ATGNTCCAC AGGAGAAGCA GCAGGGCTNN GTGTGGGGTG T

SEQ ID NO:1849: (Length of Sequence = 318 Nucleotides)

GTGAGTCCCC CAAGAGGGGC CTCAGTCACG AATGTGATG ACCAGTGGGC ACAGGTGGAG TGAGTGCTTG ATGCCCATGG  
 TGAAAGCAGG GATGTGGGGC TTGTGCACAG TGANCTGCTG GACCTGCTGG GAGCCGGGGC CAGGCCGTGG CGTGAGGTCC  
 AGAGGGTAGG CGAAGGCTTG GCCATGCTGT AAGTAGGGCT GCGGTTCTNA TAGATGGATG GCTCAGGTGG GGGGTACGTG  
 GTAGGTCCAG GGCCCTCTGC CACATCCTCC TTGTAGANCC AGTTCTTGTC CCTGGAGGCC AGACTINTAGC AGGGAGCA

SEQ ID NO:1850: (Length of Sequence = 406 Nucleotides)

GGAAGCCACT GATTTTCCTT CCAATATGAT GATTACTTTT AAAAATGAAC CCAGAGGGAC GGGCATGGTG GCTTATGCCT  
 CTAATCCAG CACTTCAGGA GGCTGAGGCA GGCAGATCAC CTGAGGTGAG GAGTTGAGGA CCAGCCTGGC CAATATGGTG  
 AAACGCTGT NTCTACTGAA AATATAAAAA TTAGCCGGGT GTGGTGGTGT GCACCTGTAG TCCCAGCTAC TCAGGAGGCT  
 GAGGCAGGAG ACTCACTNAA CCTGCTGGT GGAGGTGCGA ATGAGCCGAG ATTNCACCAC TGACTNCAGC TTTGGCAACA  
 GAGCAAAGAC TNCGTCTTCA AAAAAAATA ANAAGGGAAA AAAAACCNG NAAAAGCTTT TTTATTGTGA AAAACAAGTG  
 GGTAC

SEQ ID NO:1851: (Length of Sequence = 328 Nucleotides)

406

CTGAGGGGCA TTTTATTATTA TAAATTTAAT ATGGTTGATT AATGAAAAAT GACAATGAAG TACCAAGAAA ATGTTTGTCA  
 ATATAAAAAAT TTTAGCAGCA TTTCCATAGT TTCAGGCTCC AACATTAGTC GTACTTCCTC CCTCCCGCTA TCAAAAAAAG  
 AAGAGACTCC AATGGGATGG AGTAGAGCCT GGGGGTGTCC AGCTTTGTGT GGGCCTCAGA GAAATACTCC ATCCAGCATC  
 CAGGATTCTC CCTCCCTCTC ATCCCTGAAG TGCTAGAATG TCAAAGCACA GAAAAAGCCT CCTTTGTGCT GACATTGGAG  
 ACAAGGAT

SEQ ID NO:1852: (Length of Sequence = 174 Nucleotides)

GGGCAGGACG GCTCTNGGCC CTTCCTGGCT GACTTCAACG GCTTCTCCCA CCTGGAGCTG AGAGGCTGAC ACACCTTTGC  
 ACGGGACCTG GGGGAGAAGA TGNGCTGGA GTTCGTGTT CCTGGCACA GGGCCGACG GCTTCTGCT CTACNAACG  
 GAGCAGTAAG GACG

SEQ ID NO:1853: (Length of Sequence = 252 Nucleotides)

GAGCCATGCA CACACACGGC CGCATAGTCA CACACGCATA TCTACATGTC CCCCCACAT ATACACACAC ACATATACAT  
 GGACCCATGC ACACACACAG CTGGATATTC ACACACACTT GCACATCCAC TCCATATACA TAGACACGCA CAGACACAGC  
 TGCATGTTCA CACACGNGGA CGTGACACG GACACAGACA TGCATGCATA TGCGCACAGG TGTGTACAGC CTCAGTGGTG  
 GGGTTGGCT GT

SEQ ID NO:1854: (Length of Sequence = 288 Nucleotides)

GGAAGGAGGG CTAAACAATG GTCTGCAGCT CAGTTACTCC TCATCCTCGC CTGGGCCGGG CCAGCATCCA CTCCCTTCC  
 TGTAAAGCAT TTGGATTTC TTGGGAAAC AGCCCTGCCC TCTGTCTGA TCCATGTGTT TTGAGATCTC ACAGTAGCAA  
 GTGACTCATG TTGGTTCACT GATTCCCAGA GGCTGATTCA AGGATGTCCC CAGCTAGACC CAGGATGGTG GACTCCAGAT  
 TGGGGCACTG GGCAGTTTCA CATCTCAAG GCTTGGCCAT CATCGGG

SEQ ID NO:1855: (Length of Sequence = 293 Nucleotides)

AAAATGCTTG TTGATATTTT AGTTATTAAT TCATATTAACT TTTGGCTGAA ACTTTTAAAT TCTATTGTGA ATAGTCAAGT  
 AAAATTTAGA TTGTTACATT CTGGTTAGT ATTAGATTGT TTTTAAAGATT GTTTTAAACA AGATGTTTTT AAGATGAGTT  
 TTAAATAGTT CTCCTAACAC AAATAAAGCT TAATATGAGT ATTTGAAGGA AATTATCCCA AACCATTCCA GTTCTTGGCT  
 GTGAAAGGCT TTTCCAGGGC TAATAAGTTT TCCACTTCAG CCGTAAGTAG GTG

SEQ ID NO:1856: (Length of Sequence = 308 Nucleotides)

ATCTTAGCAG AATCTTGAAA AGCCGAGAGA TCCAAAGAGC CCTTCGAGCA CCACGCAAGA AGATCCATCG CAGAGTCTTA  
 AAGAAGAACC CACTGAAAAA CTTGAGAATC ATGTTGAAGC TAAACCCATA TGCAAAGACC ATGGGCCGGA ACACCATCTT  
 TCGCCAGGCC AGGAATCACA AGCTCCGGT GGATAAGGCA GCTNCTGCAG CAGCGGGCAC TTACAAGCCA AATCAGATGA  
 GAAGCGCGCG GTTGCAAGCA AGAAGCCTGT GGTAGGTAAG AAAGGAAAGA AGGCTGCTGT TGGTGTTA

SEQ ID NO:1857: (Length of Sequence = 299 Nucleotides)

GGGGAAAGCT AATTGGAAT AATCCTTGGC GGAAGGTGAG ACTCCTCTCT TACAGATCTA GGGAAAGGCT GTTAAATGA  
 TGGCTCTTTG GAAATGCCA AGCTCCTTCA GATTCCATAC CCTCTGGGC CCTCAAGCAT AGGCAACGAA CTTGTTCTTG  
 GCTTCACGNT TTCTCATTGA ATCAAAGCTC TCATGCATGG CCTGGATTG TAAACACATG CTGGCTGCCA GCAGTGGCAA  
 GTTAGCCTCC TGACCCACTT CTCTCTGCT TCACTCTGG TGTATGAAGG GGGATGAGG

SEQ ID NO:1858: (Length of Sequence = 295 Nucleotides)

407

TAAGACTTCC TGTTAGTAAA AGCTACCTCA TGAAAAGTAT TGATGTTATT TGCCAACATT TAGACTAGCT TTGTTACCG  
 TTCAGTTAT TCAATTTAGT CAGCACATGT TTGAGTGTCT TACTGCAGGT GAATAATCCA TGATTTCTGC CCCAGAGTAG  
 TTCATAAGAC TGGTAGGATA CATAGATTG TAAATAAATA ATTATAATTC TGGGCAGTAA GTGCTGCTAT AGAAGTCTCT  
 ATAAAGCAAT GTGCAACAC AAGAAAAGGA GCCGTTAATT CCTTATAGGG AAAGG

SEQ ID NO:1859: (Length of Sequence = 326 Nucleotides)

CTTTATTIAG TGCTGGGGCT TTGGAAGCAA ATGTACCTGA GTTTGAATCT CAGGGATAAC CTTTGGACTG TGGCCCTGGG  
 TAAGTTACTC ACTGTCTCTG AAACCTCAAG TTCTCATAA ATAACCTAAG ATGGACAATC ATAACCTCTCT CTTGGATTGA  
 GGTAGGAGAA TATGGTGGAG GCAGGGAACC GAAGGCCATT TCACTCCAAC TTCTAGAAC TAAATTAAAA GGAAACCCCT  
 AATTTTCCAT GCCTAAGTAA CAAAAGGACC AAAGGTTACT CCGTTTGCAA ACTCCACCT TTTCTGCATG GCAGATGGGA  
 AGTTGG

SEQ ID NO:1860: (Length of Sequence = 294 Nucleotides)

CCACCCCTAA AAGCACCTGG CCCGCTACA GCAAACCAGG TCTGTCCATG CGGCTGCTGG AATCAAAAAA AGGCCTCTCC  
 TTCTTTGCGT TTGAGCACAG TGAGGAGTAC CAGCAGGCTC AGCACAAGTT CCTGGTGGCC GTGGAGTCTA TGGAGCCGAA  
 CAACATCGTG GTTCTGCTCC AGACGAGCCC TACCACGTT GACTCACTCC TGCAGCTCAG CGATGCCTGC CGCTTTCAAG  
 AGGATCAGGA GATGGCTCGA GACCTGCTAG AGAGAGCGCT GTACAGCATG GAAT

SEQ ID NO:1861: (Length of Sequence = 183 Nucleotides)

TGAAGACTCC TAATCTAGTG CCTCGAGAAA AGCAGGCAAC AGAGGCTGA TGTCTGACAT TGACTCTTTG GAAGATTAAA  
 CTTCTCACA GATTTTINATA ATNACTTTGG AAATNATGAC TGATGCCAG GCTGTTCCTT GGGTGGACAG TTGTCTTTT  
 TTTTTTTTTT TTTTTTTTT TTT

SEQ ID NO:1862: (Length of Sequence = 296 Nucleotides)

TTGGGCTTCT TAAAGTT... CCCATCCCTC CTAAGGTCTA AGATGATGCA TTAACACAG AGGATGCCCA ACAGTGGCTG  
 ATGGAATTAC CAAGTAAAAT CTAAGAGGTA GAAAAATGIG GTAGTTTTTA AATTTTATTT TATTAGTATG CAGGTGGGAT  
 TCAGAGACGT AAGATCTTAG CCTTTATTTT CAACATCTCC CATGCATGTC AACAAAGATT ATCAAACACA GGAAGTGAAT  
 AAAATACTAT GTAGACACTG ACCCTCTTTA TATAAAATGT GATTGATCAG GTCTGG

SEQ ID NO:1863: (Length of Sequence = 259 Nucleotides)

CAAAACAAA AGGGGCTCAA ACCAACAGGA AGTCAGCCCC ACCGCAAGCC GGACTACAAC TAACTCGTGC TCTCCACGCT  
 CAGGCGTGGA AGCCAAGGCT GTGCCAGGCC TGGCCAGGCC AAGCAGGATG ACAGCAAACG CATCTGAAC GINTAGCAAT  
 CAGGTCCCCT GTAATGTGCT TGGAGAGTNT GGACAAGGGC CGAGATGACG AGCTATGAGC TGTGGAAGGG AATGGGGGAA  
 GCAGAAGGGC ACAAACAGA

SEQ ID NO:1864: (Length of Sequence = 290 Nucleotides)

ATCCTTACCA ACAATGCTTC CCACTGCCT CAAAGCTCTC CTAAATGAGA ACATAGTTCT TTCTGAGCAA GGTCTGTGG  
 ACCATGAAGA ATGTCACCAA GCTCCCTCA GAGTCAGCGG GAGCTCAGCC AAAGCACAAG TGCAGTGCCC AGCTCCTCCC  
 ACTCTGCACC TGCTGCCTCA NACTCCCCAC GCTGAGCCCA GGCCCTACC CTCTGAAGGT GTTCCCCTG TGATTCTGAC  
 ACACACACC CACAAGAACC AGATGATCTA TGNCATACAG CATTTAGCTA

SEQ ID NO:1865: (Length of Sequence = 236 Nucleotides)

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CATTTCTGTT ACATTGAGAC TTCAGTCACC AACATCTGGT GGCAGAGATA CAGGTGTATG AAACATTTCT ATTTACCCAA  
 ATATGCCAGT TCCCAAATAG GATGACTGCA TTTAGTGTTA AACTGGCTTT TCTCATTAGA TACTCTAATT GAGGAATATT  
 TAGCTTCTTG AATAGAAACC ATCCAAATGA TGTITTTTTT TTGATATGTC TGTAACATA AAAATCAGCA AATAAG

SEQ ID NO:1866: (Length of Sequence = 424 Nucleotides)

TACGGGAAGG CGGTGTTTGG AGGCTGGAGC CGTGGCAACG TCATGAGAA AATGCTCACA GACCGCGGT CTACAGACCT  
 TAATGAGAGC CGCGTGCAG ACGTGCTTGC CTTCCCAAGC TCTGGCTTCA CTGACTTGGC AGAGATTGTN TCCCGGATTG  
 AGCCCCCAC GAGCTATGTC TCTNATGGCT GTGCTGACGG AGAGGAGTCA GATTGTCTGA CAGAGTATGA GGAGGACGCC  
 GGACCGACT GCTCGAGGGA TGAAGGGGGG TNCOCGAGG GCGCAACCCA GCCTGCCTC CGAGATGGAG GAGGAGAAGT  
 CGATTCTCCG GCAACGACGC TGTCTGCCCC AGGAGCCGCC CGGCTCAGCC ACAGATGCCT NAGGACCTCG ACAAGGGTCA  
 CCCCTCCTCC ACCCTGGACT GGCT

SEQ ID NO:1867: (Length of Sequence = 256 Nucleotides)

AAACAATTGA AATCCACAAG AAATTACTAA CAGCAGTGT TTACGTTTTA TCCTGAATCA TACATTTTAA CAATTCACAG  
 CTACAGGAAA TCTAGAACAA AATCAAATAT TCATCAGTT GGGTGAAGAA GTTGAAGAT TTTCATCTT ATTGAAAGA  
 ATTTTCAAAA AATGTTCTG TACAAATGA TGAATTGCA CCAGGCTGCC CATGGACACC AGGTGTGGCC GCTTCCCAAC  
 GGTCACCCAC CAGCTT

SEQ ID NO:1868: (Length of Sequence = 297 Nucleotides)

CAAGGTTTTT TTTTATTGT AGCTATAGCT ACAACTTGGC AGCATGGGG AGGGTGGGA TGTCCTGGAG GGTCTCCAG  
 CCTCCGCA GCAGAGTACA AAGGCTGCTC GGGGGCCCG CCGAGGGCG GGTGCAGCA GTGNAAGCAG CAGCACTAAA  
 CCTGGTCCCC CCTCAGGTG GGGTGTCTGG AAGACGGTGG GCAATCCCTG CAGGATGGGC GAGGACCAGA CCCAGGGCG  
 GGGATCCTGC ATCCCTAGAC CATGTTGGGT CCTGGGTCA GGCACCTINGG NATGCTA

SEQ ID NO:1869: (Length of Sequence = 470 Nucleotides)

CAGACATCTG GAGCATGGGA CTGTCTCTGG TAGAGATGGC GGTGGGAGG TATCCCATCC CTCTCCAGA TGCCAAGGAG  
 CTGGAGCTGA TGTTTGGGTG CCAGGTGGAA GGAGATGCGG CTGAGACCCC ACCCAGGCCA AGGACCCCCG GGAGGCCCTT  
 TAGCTCATAC GGAATGGACA GCGCACTCC CATGGCAATT TTTGAGTTGT TGGATTACAT AGTCAACGAG CCTCTCCAA  
 ACTGCCAGT GGAGTNTTCA NTCTGGAATT TCAAGATTTT NTGAATAAAT GCTTAATAAA AAACCCCCGC AGAGAGAGCA  
 GNTTTTNAAG CAACTCATGG TTCATGCTTT TTATCAAGGG GATCTNGATG CTGAGGAAGT NNGATTTTTT CAAGGTTGGN  
 TCTGCTNCAC CATNGGGCTT TAACCAGNCC CGGNACAACC AACCATGNN TGNITGNGIT TAAGNGTTTT

SEQ ID NO:1870: (Length of Sequence = 344 Nucleotides)

AGAGATTAGA TTTGTTAAAC ATCTAGGTTA AAATGGTTAA AAGGATTTTC ATACAATTTT AGGCACTATA CACGTTGTTT  
 ACAACAGCAT TGGTACTTGG ATATGGGGAA AGATAAATCC GACATTTTAA TATCTTGATC AATTGTGAC ATTCAAATA  
 ATTCCATTTA AGAAACATTA ATCAAACTT AAAGAGACAT ACCACTAAGT ATCCACACA GTATACTGAA AATAAATATA  
 GNAATACAAC CAGAAGTCTA CAGNTACCA CAGTAGACAG ACTGGTGAAG NCCCAGCTTT TCATGGGCAG TNAAGGGCTC  
 TGGGCTAGAT TTGGGTGTCA ACTG

SEQ ID NO:1871: (Length of Sequence = 278 Nucleotides)

GGATTTATTG TCATTCTCC AAGGTCAGCA GGGGAAGGGG ACACCAGCCA CACTTCACCA CAGGCATAGG TGGCACTGAG  
 CCACCTGGCA CTATCTCCAC GTGCTCCACA CGGAGGGGTG CCTTCTCACT GGCAGCAGCT GCATTCTCT GCTTCTGCT

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CAGCTGCCTC TCCGCCTTTG CACACACAGT CCTTGGCACA CTTCTCACAC TNCSCAGGCA GCAGGAGCAG CAGCTCTTCT  
TGCAGGAGGT GCATTTGCAT CCCTCGCACT TGCAGGAG

SEQ ID NO:1872: (Length of Sequence = 271 Nucleotides)

CTTGCCATCT TCACAGCCAG AAGCTTCCTT GCTTCATGCG CAGACCCCTCG TGACTCCCCT TCCCTTATAA GGGCCCCCAT  
GATTACTCAG GGGCCACCTC AACCATCCAC GGTCATCTCC CCACCACGAA ATCCTGAACT GAAGCACAGG CGCCGGGTCC  
CTTTTGGCCAC GCAAGGTAACT ACTTTCCAC GTCTGGGGT TCCAAACCTG CACATCTCTG GGGGCTGTTA TTNCACCCAC  
CGTCATCAGT GAGGCGCCTT NAGGAGGGGC T

SEQ ID NO:1873: (Length of Sequence = 332 Nucleotides)

CAGGGTATAG TGCAGTGGCG CAATCTGGC CCACCACAGT CTGACCTCA TGGGCTCAAG TGATCCTCCC ACCTCAGCCT  
CCCAAGTAGC TGGGACTACA GGCACTCTCC ACCATGCCCA GCCAATTTT TGCATTTTC ATAGAGAAGG GGCTCACCA  
TGCTGCCCAG ACTGGTCTCG AACTCCTGGG CTCAAGCCAT GGAATTGCCT TGGCCTCCCA AAGTGTAGG ATCAGAGCCG  
CGAGCCCCCTG GACCCGGCCT ATAGTTTTTG TTTCGCTTTG TTTTGTTTT TTGAGATGGA GTCTCACCCT GTCANCCAGA  
TGGGAGTGCA GC

SEQ ID NO:1874: (Length of Sequence = 317 Nucleotides)

CTCTCCACCT CAACCTCCAG CCCACCTCCA GGCTGGGGAA GGGGCTGAGT CTTCCTCTCC CATACATACC TCACCCGGCC  
CCCAGCCCAC AGAGAGGCTG AGGGAGGGGC TCTGGTCTCT CCTCCATCCC TGTACCTGCT TCTTCCCTCT TCATTTCCAC  
CTTCTAGATC TTTCCCCCA CCCAGCCCAC CTCCAGGCTG GGAAGGTGA GGAATTCITT CTTCCACAC CCTACCCAC  
CTCACCTGCA GCTGTGCCC TGGGCCAGGA GAGGCATGGG TGAACAACCA GACCCACAAC CCCCAGCCT GCAGGCT

SEQ ID NO:1875: (Length of Sequence = 185 Nucleotides)

GIGITCCACC CACCTGGCC TCCAAAGTG CTGGGATTCC TGGCGTGAGC ACGCTGCGCC TGGACAGTCT GCCCCTAGAT  
GAGTTGCCCA GCACGGTACA GCTACTGCCT GCCCAGACC CAGCCCTGA TTCTACCGCC GCTCGGCAGG GGGACGGCCA  
GGGAGAGGTC CAGCCGCGCG GCAAG

SEQ ID NO:1876: (Length of Sequence = 214 Nucleotides)

CCTGGGGACA AAATAGTCAG CAAATTCTCA AGGGGAGAAA ATAAAGTACT TCCCTTCTGT TAAAAAAG TCAAGAGACA  
AATCTTTCT CCCCCATTCT CACTAATAGT TATTGAAGGG GAAAAA AACCACAA CTTTTTAAAC TAAAGATAAA  
AACAAATGAA AATGAATAAG ATCCAAAGAA TGTCTTTTGT TACTCTGCCT TATG

SEQ ID NO:1877: (Length of Sequence = 340 Nucleotides)

TTGAAGAAG AAGAAGTTGA ATTTATCAGT GTGCCTGTCC CAGAGTTGC AGATAGTGAT CCGCCAACA TTGTTTCATGA  
CTTTAACAAG AAACCTTACAG CCTATTTAGA TCTTAACCTG GNTAAGTGCT ATGTGATCCC TCTGAACACT TCCATTGTTA  
TGCCACCCAG AAACCTACTG GAGTTACTTA TTAACATCAA GGCTGGAACC TATTGCTC AGTCCTATCT GATTTCATGAG  
CACATGGTTA TTACTGATCG CATTGAAAAC ATTGATCACC TGGGTTTCT TATTATCGA CTGTGTCTG ACAAGGAAAC  
TTACAACTG CAACGGGAGG

SEQ ID NO:1878: (Length of Sequence = 326 Nucleotides)

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GAAAAACAAG GAAATAGGC AACAACTGC AATGGACACT TTCTCTACA GAACCTTTTC AACCTGAAT TGAATTGTTT  
 CCTATTTCATT TNCTAATAAA AAGTTACTTT GCAAGATATA AGGAAATACT GTCCCAAAGA TTTTCACTAG TCATTCAATC  
 CATTAAATAGG ATTTGAAAAG GCATCATTAC ACAGGGTTGA AAATACTCTG GAATGAGACT GCTTTACAGT CAGAATGCCT  
 GAGTTTGTAG GCACTGTTAC TTCTAAACAT CTCTAAGTTT CTATTNCTC ATCTAAAGGA GTAATATTAC TTTCTTAAA  
 AGGTTG

SEQ ID NO:1879: (Length of Sequence = 222 Nucleotides)

GAAAGGGAGA GGTTCAGCG AGCCAAGATC GTGCCACTGC ACTCCACCT GGGTGACAGG GCAAGACTCC ATCTTAAAAA  
 AGAAAACCCA GGAGTCTTTG GTTAATGTAG TGCAGGACTC TGAGTCCCG GGAGGACCT TCCCTCCAG ATGAAGCTG  
 ATGGACCAGC CCAAAGGAGG GGAGAGAGCA CTINGGCCAT AGTGGTGGTG GATCTTTCTA AC

SEQ ID NO:1880: (Length of Sequence = 244 Nucleotides)

GACATGAATG GTATCTCTCT GGGTATGAG ATCCGCTACT GGAAAGCTGG GGACAAAGAA GCAGCTGCGG ACCGAGTGAG  
 GACAGCAGGG CTGGACACCA GTGCGGAGT CAGCGGCTG CATCCCAACA CCAAGTACCA TGTACOGTG AGGGCCTACA  
 ACCNGGCTGG CACTNGGCTT GCCAGCCCTT CTGCCAAGCN CACGACCATG TAAGCCCCCT CCGCGGCGAC CTCCTGGGCA  
 ACAT

SEQ ID NO:1881: (Length of Sequence = 156 Nucleotides)

GTACAGGGGA GAGTTGAGCT GTGACAAAGT CAAACACAGG CCTTGGCCAC CCACAGGAGC TCTGCAGCTG GGGTGGTCTT  
 GAAAGTTGTC TCAGTGAAGG CAAGGTGCTG AGCTTATTAC CCCAGCAGTC ATTGTATTTA GGCTCCGTGT GGTACC

SEQ ID NO:1882: (Length of Sequence = 210 Nucleotides)

TTTTTTTGA AACGAAGTCT CAGTCTGTCA CCCAGGCTGG AGTGCACTGG CACGATCCCG GCTCACTGCA ACCTCTGINT  
 CCCAGGCTCA AGCTAGTCTC CTGCTCAGC TGCCCGAGCA GACGGGACTA CAGGCACCCC CACCACGCCC GGCCAATCTC  
 CAAATGGTTC TTTTTTCCG GAGTAGTAAG TTACAATATG GGAGATTATT

SEQ ID NO:1883: (Length of Sequence = 214 Nucleotides)

GTGATGAATA CATCCAGTTT TCCAACCACA TTCCACCAGG TGGGTGTTTG GCTGTGGGAC GCATTATGTA ATCTTCGTTG  
 CCAGGAAATT TACCTTCCTA ATTACATTTT GCAAATGTTT ATTTGAAGCC GCCTTCTTGG AGCTCACAGT AACTAGGAGG  
 TGGCTGCTGG AAGCCCCAGG GCACGTGGG AGGGACAGGG GAACGTCCCA GACC

SEQ ID NO:1884: (Length of Sequence = 211 Nucleotides)

ATCTTTGGCT CTATGTGCCA TCACCTGGAC ACTCTAGGTA ATACCCCTG TTGGGCAGGG GTGAGCTCCC AAGGCCTCAG  
 GCAACCCAGC TCCCATGACT TTGCTGGGCT CAGCCACAT AACTGTTCTC ACAGGATAGA GTTGTACACT GGTGCTTACA  
 GCTTTCCTGG GCCAGTGTG CATGCTGCCA GTGGCTGCAG CAGCAGCCCC A

SEQ ID NO:1885: (Length of Sequence = 212 Nucleotides)

ATTAGCTGAA TTGCGTGTG GCGGTTGGG TAGGCAAAGG AGACATCTTG GAACTGGACA AGGCCCTCCA AGTGTAAAGG  
 AGTCAACAGA CCACTGGGTG GGCAGCGAGG GGTGCGGTCC AGGTACTCAA ATATTTTCTC TGAGGAGCCC ACAGCCTTCT  
 GTACTCTGGG GTAGATGGAG AGCAGTACCT CCACAGCCTG GGTGAAGTGC AT

SEQ ID NO:1886: (Length of Sequence = 208 Nucleotides)



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CATCCGCATA GTATTTACAT CATGGGTATA GGCAAGTNCCTT ACAAATCAGG NCITTNCCCTT GGGGATGGAT GTTTGGAGCT  
AGTTTACCAG CACACCAAGT GGTAAAAGTG AACAAATACT TTTTGTATCC CACAGAATCT TAAAAAATAC TTTACTTCGA  
AAATGTCTCT ACTAAGTAAT CATATATATA TATATATNTG TATATATA

SEQ ID NO:1887: (Length of Sequence = 332 Nucleotides)

CTCGTTCACT GCCCGCCAAC TCCCATTTCCA ACTTCCTTTT TACACTGGAT GTTCTATCA CATCTGAGG ACCACTAACC  
CACCAGCAAG TCTCCCCCTG ACACACATTC ACGTAGGTCC ATACCCCTTCA GAGTCCCTAAA GGGTTAATGA GAAGCCACCT  
CAGCTTTGGT GAATGGAGCC CCAGCCCCAA ATCCCCCTCCC CTGCAAATA TGGGACAAGT AGGGAGAGTC TGATGGAGGC  
ACCAGGACAA CTACAACAAC CTCTTACCCC TCAGCTATAG ACACCTAGAT CAGGACAGAG GGATGCATAT GCCCTCTCCA  
CCTTAACACC AA

SEQ ID NO:1888: (Length of Sequence = 224 Nucleotides)

AAGAGCTGAT TGAGGCTGCC AAGAGGAACG ACTTCTGTAA GCTCCAGGAG CTGCACCGAG CTGGGGGGCGA CCTCATGCAC  
CGAGACGAGC AGAGTGCAC GCTCCTGCAC CACGCAGTCA GCACTGGCAG CAAGGATGTG GTCCGCTACC TGCTGGACCA  
CGCCCCCCA GAGATCCTTG ATGCGGTGGA GGAAAACGGG GAGACCTGTT TNCACCAAGC AGCG

SEQ ID NO:1889: (Length of Sequence = 261 Nucleotides)

CACTTTACTG AGTCACACCC AGCTGTAAAC ATGTCACCGT GAGANTCCCG CCCCCACCC CCAGGCCCGCA CAGTCCGCGA  
TGAAATGACA GGGGAGCGGG GAGGGTCGCC GGAGCGGGTG CCAAGCAAGG CAGGGCAGGC AAGTGCAGCA GGCGCTGAGT  
TTCCGGGAGG AAGCCCGGAG GAGGTGGGGT GGGGCAGGAG CGNGGGCTGG GGACCGGCC GAAGACCAGG GGGCCAGGA  
AGCCTCTTTT CCGAAGGNCT T

SEQ ID NO:1890: (Length of Sequence = 312 Nucleotides)

CTGCGAGACT ACGAGACGGT GGTCTAGGTG AAGCCCCATG ACAAGGATGC CAAATGAAA TACCAGGAGT GCAACAAGAT  
CGTGAAGCAG AAGSCCTTTC AGCGGGCCAT CGCGGGCGAC GAGCACAAGC GCTCCGTGGT GGAATCGCTG GACATCGAGA  
GCATGACCAT TGAGGATGAG TACAGCGGAC CCAAGCTTGA AGACGGCAAA GTGACAATCA GTTTCATGAA GGAGCTCATG  
CAGTGGTACA AGGNCCAGAA GAAACTGCAC CGGAAATGTG CCTACCAGAC AGAGAAGATT ACAGTATGTG GG

SEQ ID NO:1891: (Length of Sequence = 298 Nucleotides)

CCTAAAGGCC AGGCAAGGCT GATTCTCCAC TTCCACATGA GACAGAGCTG ATTCTGCAGG GAAACGGCTG GGGAGGCTCC  
ACCTCTTTCC TCCCCAACAC CATTTACTGG GAAGTTGTGT ATACTTGGCA GTNTGGGAGG AAGGTACTTG GAAGACCCTG  
CCAGCCATCT CCCACCCAGA CTTCTTCTCA CCAGCACAGT CTTCAAGGCT TGGTGGGAAA GGTGTGTGGG AGTGGAGAAA  
GACAAAGGGC CTTCTTNAAG GAGAGGAGCT GCAGAGAGGG GCAAAGGGT TCCTAGCC

SEQ ID NO:1892: (Length of Sequence = 333 Nucleotides)

CTCCAAGGTC ATCCAGTCCG TCGCTAATTA TGCAAAGGGT GACCTGGACA TATCTTACAT CACATCCAGA ATTGCAGTGA  
TGTCATTCCC AGCAGAAGGT GTGGAGTCAG CGCTCAAAAA CAACATCGAA GATTGCGGTT GTTCTGGAC TCCAAGCACC  
CAGGGCACTA TGCCGTCTAC AACCTGTCCC CGAGGACCTA CGGGCCCTCC AGGTTCACCA ACOGGGTCTC CGAGTGTGGC  
TGGGCAGCAC GGC GGSCCCC ACACCTGCAC ACCCTGTACA ACATCTGCAG GAACATGCAC GNCTGGCTGC GGCAGGACCA  
CAAGAACGTC TTC

SEQ ID NO:1893: (Length of Sequence = 487 Nucleotides)

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CCAGATAGAG TTTCTGTTTT TNAGTTTAC ACGTGCCACA TCAGG3AAAG TTAGGTTATG ATTAAGCAA GAGATGATAG  
 ATGAACAAAC AAAGAAACAA CAACAAAAG CCCATGCAAG AGGCAGGAAA AGAGGCTGAC TGGTTAAAGA ACAGGCCAGA  
 TTGGACAATA CTGATCAAGA GGGGTTTACA TTGAAAGAA CAGTGCTTTA TTCCTCTACT GACTAGAACT AAAGGGATTT  
 TGGCCGGGTA CGGTGGCTCA CACCTGTAAT CCCAACACTC TGGGAAGCCA AGGTGGGCGG GTCACGAGGT CAGGAGTTCC  
 AGACCAGCCT NACCAACATG GGTGAAACCC CATCTCTACC CAAATACAA AAACCTTTNC CGAGCGTGGG CCGGGCGTTG  
 GTTGGCTCAT ACATTNATN CCCCNCCTTT NGGGGGCCCA NCGGGCGGT TCACCTTAGG GTCAAAGGGT NCGGGGNCCT  
 TCTTGGC

SEQ ID NO:1894: (Length of Sequence = 283 Nucleotides)

GGTGGTGAAG TGGGCTCTGG AGAAGCTGGA GCTGACCAAG TACGCAGACA AGCCGCTGG CACCTACAGC GCGGCAACA  
 AGCGAAGCT CTCCACGCCC ATCGCCCTCA TTGGGTACCC AGCCTTCATC TTCCTGGACG AGCCCACCAC AGGCATGGAC  
 CCCAAGGCCC GCGCTTCCT CTGGAACCTC ATCCTCGACC TCATCAAGAC AGGGCGTTCA GTGGTGCTGA CATCACACAG  
 CATGGAGGAG TCGAGGCGC TGTGCAGCG GCTGGCCATC ATG

SEQ ID NO:1895: (Length of Sequence = 234 Nucleotides)

ATGTCCATTA GCCTCATTTG TCATCTGAGG GAGCTGGTGA GAACAGCCTT GGCGTGAAGG CATCCCTGGT AGAAGTCGGG  
 GGAGATAGAT AGTCACAGTT CCCAGTTGG TGGAAATNGG ATNGGAGTAG GGAGAGGCTN GAACAGACCC TTCCCCATTC  
 ACCTGNGAA TTTTCTCCTC CCCTGCCCT AAACACTTTA TTTCATCAC AGGGGAGAAA TNCTGCTGAG AAGG

SEQ ID NO:1896: (Length of Sequence = 285 Nucleotides)

CTTTAAAGTG TAATAATATG ATTTTITAAA AGAAATTTAT TACTGTGTC AAAGGTCTTT TTAAACCACT TTAGATTTCA  
 AGAAAAATA AATGGAATC ATCGAAAATT CATTTACAT TAATGGTCTA AAAATAAACC AAAGGACATT ATGTGTGCAT  
 GTGTGTATAA GTGCACACAG AAATATATAT NCATATGTING ACTATATACA TGTGTGTATA TATGTGTATA TATACATNCA  
 CTTGTATAAA TGTATATACA CATATACCTA TAATGTGTGT ATGTG

SEQ ID NO:1897: (Length of Sequence = 288 Nucleotides)

GCAGTTTAT GTTTTATTT ATGTATTNA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTAC AATATACTTG  
 CAGAACTGTG CTTGGSGSAT CATGGGAGCA GAGAACTTGT CCAGTGAATA GTTGTGAAG AAAGGAGTAA AAWCTCCCC  
 AAACCTAAA GGCATCCTTT TCGTAGTGTG TGTCCAYAG GTATGGCTGC TGAGCACCAG GGGCTGCTCA CCATGNTCCC  
 AAGAAGCAGA GTCANGGAGG CAGACAGCAG GKKTTATTAA GGTGCACA

SEQ ID NO:1898: (Length of Sequence = 398 Nucleotides)

CAGAAGTAAA AGATTTTAT TGTCTATAG ACACTTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG  
 TTTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAAT  
 GATCAGTAAA AACATGCAA AGTGAGAAGG AAAGGGAAAA AGGTGCAITC CCCTAAGCTG AGGGGGATGG AATTTAGAA  
 CAGAGGAGGC AGGGTGACA AGTACCAGGT GGCTCTCCCT TTCCCTCTGT GTTATCTTTC AAAACAGTTC CAAGCTTTGA  
 GAAAGCAATG AGCTCCACCT ACTCAGCAGA CCCACGGTTC GTCCCCCTGG ACGTGACTTA GCACTGACCT TGCCCTGCC

SEQ ID NO:1899: (Length of Sequence = 227 Nucleotides)

CATGGGGACC CGGGTTTATT TTATTAGGAA GGAAACAACC AAGCACCCCA TGTTCTGCC CGGACTCCC GGGGGGAACA  
 TGCCAAAMAG CCGGGGATCG AACCAGCCC ACCTGTCTGT GRGGKCCCTT CCTTCTCAGG CCACAGAAAT AAACCCGTGT

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ACTTYTTATT GTTAGCACAA CATTACCAGA AAACGKTAAC GGCAGCCAAG CAGGACAGAC AGTTAAG

SEQ ID NO:1900: (Length of Sequence = 405 Nucleotides)

GGGATGCACT GGGTTTCACA TCAAGTTCTT GAGAGGWTCC CGAACGACTT CTCTGCCCCA GGGGAGTCCG AGCCACAGTT  
TTCTGATCAA CTGATGATTC TRACCCGCTT CTTCTCTCTT GGGGGGTAAG ACACCTGTGTG TTGAGCTCTG GGGATGATGG  
AGAACGACTC CTCGGCCTAG GAGTCTGAGG CAAAGCTTTC GGTTCGTGGG AAGAATCACA TTGCTTCTC CCTCTAGATG  
GCGTTCIAGG TATATCTTTC ATTCCAGGAG AGGACCCAGA CAGGCTGTGC CTCGAGGGAG TCCCAGACCC ATCTCTAAGT  
CCTGGAGAAG ACCCAGACCT GCCTCTCCTT GATGGAGTTC TGGTAAACCA TCTTTTCAITT CAGGAGAAGA TGCAGACTAC  
TTCTT

SEQ ID NO:1901: (Length of Sequence = 244 Nucleotides)

ATRAITCATA TGCTAGTTTA TTTATCTTAT TATTGAGAGA TAATTTTCATG ATGACAGITA TCAATAATCA ATTACAATAT  
CAAGAAATTC AAAGAACAAA ATCTTGCAGA GACTATGCTT TTGTATTTGG ATTTAAAAAG TATGTGATCT CATTTTCACA  
TACCAAGCTG AGAGGCCATT TAGACTATCT CTTTGCTAAT TTTTGCTTAC TGCTGTAGGG AAGAAGATT CCAATGAMCT  
TTAG

SEQ ID NO:1902: (Length of Sequence = 329 Nucleotides)

TAAAAATAAA AAAATAAATA AAATTTTAAA AATAATAAAA ATTCACATATA TACACATATA AAGAAATAAA AAGAAGTCTC  
AGTTCAGCT ATTTGTCAAA ATTAATATCC ATTTCTWTTW ATATACGGTG AATATTGCGC AATTATAGAT CTGGATTTTA  
AACCACTTAA TGAAGCGGCA ACACCAGGTG TTTAAGGTG TTGGCATTCT TCGCTGATTT GGCTGTTCCT AATGTTTACA  
TTATTTAATC TTGCAAAAAT GGTTCGATG CACTTGGGAT GTGAAATGCT GTCCCGTTT ATTTTTTAA TGTGTATATC  
CTTGGGTGT

SEQ ID NO:1903: (Length of Sequence = 421 Nucleotides)

ATTTTATATT CCACAGTCAG GTGGGTCTGC GATASTCATT TAATGTTAAA CGCCATCAGG GGCCTCTCCT CCCGTTTCTG  
CCAGGGGCTT TTCTGTCTT CTCCTTGGTC ATCATCATCA TCGTCTTCCT CTTCTCTGTC GGCAGATCTT CTCTGGTGGG  
GGCTGCTGC TGGCTCCGAG GGGGCATCCG CAGTCCGTCT GGTGCTCTCC TCCTGCAGGC TGGGCAGCTG GCCACCACTT  
CTCCGACTCG ACCCTCCAA CAAGCATCGC AGGGCACTGT CCTGGGGGT ACAGACCGTG GTCCACATT CGCTACCACT  
CTGTTCCAG NCATCCAGG TACACGAGCT GCGTGTAGGC CGTGTCTCT TGGGGCTCGA GGCTCTTTCT GCTGGTGTCT  
TTGGACGGGC GGGTAAATTC T

SEQ ID NO:1904: (Length of Sequence = 423 Nucleotides)

GTCTGTGGC CCTGTCTGAA GTGACGGTGC AGCCAGGCTG CTCCTGCCC AGCAACCCG AAGCCATTGT GCTGGACGTC  
GACTACAGT NTGGGACCCC GATGCAGAGT GCTGCAAAAG CCCCATATCT GGCCAAGTTC AAGGTGAAGC GATGTGGAGT  
TAGTGAACIT GAAAAAGAAG GTCTGCGGTG CCGCTCAGAC TCTGAGGATG AGTGCAGCAC GCAGGAGGCC GACGGCAGAA  
GATCTCCTGG CAGGCAGCCA TCTTCAAACT GGGAGACGAC TTCGGGCAGG ACATGCTGGC CCTGCAGATC ATOGACCTCT  
TTCAAGAACA TCTTCCAGCT TGTGGCCTG GACCTCTTTG TTTTCCCTA CCGCGTGGT GCCACTGCCC CTGGGTTCGG  
GGTGATCGAG TGCATCCCCG ACT

SEQ ID NO:1905: (Length of Sequence = 370 Nucleotides)

CAGAACCAGA ACATTTTAC TCTTTGGGCT CTGGGAAGGG CCAGGCAGAG TGCAAGGTGT CCACAGGAGG GGTAAGCAGA  
GAGGAGCTAC AGGGGGCTGC AGTCCTAGTA CCCTGTTGGG GAGGACTGAG GGATGGTGAG TTTGGTCTCC GGAGGGGGCT

414

CCAGTCCTGS TGCCCACTTC TNACANCTGC CCTCCTGAG TTCACACTGS AGTCCTTGCA GTCTGAAAC CACAAGGCCT  
 NOCTGAACCC TGGGTCAGGA GAGAAANACT TGGGAGGGG AAAGGACGGC GTGGGCTACC CATKACGGCT CTGASTTCTT  
 CCTGGGGCTT GTGTCTTTTC CTTGGCAGAA GAGGSCACAG CCAAAGGCAA

SEQ ID NO:1906: (Length of Sequence = 415 Nucleotides)

GTCACACCTT CATTCAGTGA GGAAGAAATG CTTTCACTCT GGAATTAC AGCATCCCAA TCTGACGTG TACCCGTGTG  
 ACACTGTTTG TGAGCCCAA GTTCAACGA GCTCTTGCAA GTAAACGGAC ATTCTGCACA TTGTAGACA GCTGTCTTTC  
 CAGATAASTG GATGTTTTCT ATGTGACGAG AGATGCTACG TCGATGCATG GTGAGGAAAG GACAAAAGGG GCACTGGAAC  
 CTATTCATGA ATCTNCTAAA TGAATCCCT TTGGTCTCCA ATAATTGTG GCCATCTGAG CCCATCAGCT GCTCTGCAGA  
 CAGGCTGAT GTCTGGTGAT CCACAGCACT TAAACCATTC TCACCTGTCT ATTCATTTA ACTCTTCATC AGAACTAGAG  
 TCATTAGCAT GCTGT

SEQ ID NO:1907: (Length of Sequence = 214 Nucleotides)

TGAATCCTG TACGTGTCAA CTTTGAAATG TATGTGTGT GGTGGGTGG TGGTATGTG ATACGGTTG GATGTCTGTG  
 CCTCCAAAT CTCATGTTGA ACTATAATCC CCAATGTTCC AGTGAAGTG GTGTTTGGTT CCATGGCGGG GTACCCTAGG  
 GATTCATCTG TTTCTTCAC TTCCCTTTC ATCTGAGATC CTGCTGSAAC CCAC

SEQ ID NO:1908: (Length of Sequence = 410 Nucleotides)

CAGGAGAGCT GGGCAGATGT CCCAAGCCTG TNAGTGGCCC TCCTGGTGC ACTGTCCCCG AAACCCCTGC TTGGGAAGGG  
 AAGCTGTGG GTGGCTAGG ACTGACCTT GTGTGTTTT TTTGGGTGGT GGCTGGAAC AGCCCTCTCC CAGTGGCAG  
 AGGCTCAGCC TGGCTCCCTT CCTGGAGCG GCAGGGCGTG ACGGCCACAG GGTCTGCCCG CTGCACGTTC TGCCAAGGTG  
 GTGTGGCGG GCGGGTAGGG GTGTGGGGC CGTCTTCTC CTGNTCTTT CCTTTCACCC TAGCCTGACT GGAAGCAGAA  
 AATGACCAA TCAGTATTTT TTTAATGAA ATATTATTGC TGSAGGCGTN CCAGGCAAAG CCTGGCTGTA GTAGCGAGTG  
 ATCTGCGGGG

SEQ ID NO:1909: (Length of Sequence = 339 Nucleotides)

AAAATTAAAT CCAATTTTA TTAAGGATTT CAGTTACAT ACTTCAAAT TCTAGAATGG AATGGAATCA TTTTGGAACT  
 GGAAAAATGG CATAAAGACT GACGTCCCTT AAACTTCAA TTTTATAAAG AAAATCTTC TGCAAACCAC ATCCCCTTTA  
 TGTAACAAGA CTAGGTATTA TCTACACCTT CACTTTGGCA ATAGCTATTT CCTAAAGAAT GAAAAAGATG ATTTTNTTAC  
 TTCAGTTCAT TAAAAATGGG ATTCTATCTT TGAAGTTCAG AAAAGCTGC ATTTGATGA ACTATGGGT AAAAATAA  
 GCACATAGTG TCTAATCAA

SEQ ID NO:1910: (Length of Sequence = 439 Nucleotides)

GGCCAGGGA GCACCAATCA CAGCAGGGC TCTGGCCCAG GTGTGGCAG CCCAGGCCTC CATTTGCTAA TGATTAATAC  
 ACTGTTTGG CTGGCCAGTT TTTATGCAT GCAGCTTGAC GATTGAGCAC AGTCAGGCCT TTGTATTAAT AATGAAAAAT  
 GAAAAACAA ATTCAAAACC TATTCAAATG GGTCTAGTT CAATTGTGT AGTATAAAT GTCATAGCTG GTTTACTGAA  
 AACAAACACA TTTAAATTTG GTTTACCTCA GATGACGTG CAGAAAAATG GGTGAAGGAT AAACCGTTGA GACGTGGCCC  
 CACTGGTAGG ATGGTCTCT TGTACTTCGT GTGCTCCGAC CCATGGTGAC GATGACACAC CCTGGTGGG ATGCCCGTGT  
 ATGTTGGTTT AGCGTTGTCT GCATTGTCTA GGAGTGAAC

SEQ ID NO:1911: (Length of Sequence = 342 Nucleotides)

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AATGCACCCA TTGGGCTGCC AAGAGCTTCT CACTGCCTTG CTAGCAGCCT GCCACTGTNC CCTGGCAAAT TGAAACCACC  
 CACGCAAACA CTCAAAACCC CAATCTCCTT GCTAATAAGA TACAACCACT TAACACCGTG AAAAATGCAC ATCTCCAGCC  
 TTCATTTCAA AAAAGAGCTC TGTACTAAAT GCAATATGCT TTAAAGGGG GTTTTACAGG GACCAATCTC AATGCAAAGA  
 CCAGTACCAG ATGTCTGAGT TTGGTTACA GGTITATAAT TAGACACAAA ATTCACTCCA CACTGGAGTT TTACTTTCAA  
 GCTGGAGTTA GCATTAGTTC TA

SEQ ID NO:1912: (Length of Sequence = 380 Nucleotides)

TCATGCTTTT AATACAACT TAAAAAATC TGGAACAATA GAACTGTAC AGATTGATC AATCTTTTGT TTTTGTITTT  
 AAACTAAAAT CTCTAAACAC ACCAATGTCC CATTCCAAA TATTGCACAA CATTCTGAAT ACAAACCCCT TGATTGTATT  
 CCTCTNCAC TAAAGAAAA AGTTCATGAC CCTGCTCCCC GGGCTCCTCT CCAGGCTTGC CTCAATGCCC CCTTCCCATC  
 CCTAGGGAGA AACTAGAGA ATCTATACT CACTGCATTG AGAAAAACAC ATCATTCTGG ACTAACAGTT TTCCATTCTT  
 CAGANGNIA ATCCACCTTT TGGATTGTIT CCTGGGGAAA GAGGGGTAGA TAGAGGGATG

SEQ ID NO:1913: (Length of Sequence = 361 Nucleotides)

GAGACAGAGT TTGCTCGTT GCCCAGGCTG GAGTGCAATG GGTGATCTC AGCTCACCAC AACCTCCACC TCCGGGGTTC  
 AAGCCATTCT CTGCTCCG ACTCCGAGT AGCTGAGATT ACAGGCATGT GCCACCACGC CCAGCTAAGG CTTTGTATTT  
 TNAGCAGAGA TGGGGTTTCA CCATGTGGC CCGGCTGGT TCAAACTCCT GACATCATAT GATCCCCCG NCTCAGCCTC  
 CCAAGTGCT GGGATTACG GTGTAGCCA CTGCCCTGGG CTCTCCAGTA CATTTTTAGG GGGACGATCA ATGAGGATTC  
 TCTTCTCTGA GTTACTGCAT GTGTACAGT TTATAATCT T

SEQ ID NO:1914: (Length of Sequence = 409 Nucleotides)

GGGGGCCCTA CAACTAGGTA TGGTGGATAT TGCCCGACAG ACGGTGAAT TTCTCTACGA AGAGAATGGT GGCATCCCAA  
 GAGACCTTTA TCTTCCACC ATTGAAGACA TTAAAGACGA AGCAAACAAG TTCACAATTG ATAAAGTTCC AAAAGGTCTC  
 ACAGTAGTAA CCGCTCTCC AGACAGCAAT AATGTAGCCA GCAGTGTGT TGGAACTGCT CTGCCAAAAT TTGCCATCCG  
 AGGGATGCTG AAAACCTTTG GGCTTCATGG AGTCTCTTA GATGTTGATT CAGTGAATGA ACTGGTGCAG GTAGAAACGT  
 ACCTCCGCAG TGAAGGTGTG CTGGTGCGAT ACTTGGTATC CTATTTGACA TGTGGGAAA GGGCCCCCAG CAGGCTACCG  
 AARGGACTT

SEQ ID NO:1915: (Length of Sequence = 402 Nucleotides)

ATGGTTTATA GCAGGAATAC TTGTCTGAA TGACTTGGAG GGAAAGTGTG TGTGTATATG TGTGTGTGTG TGTTTGTAG  
 TTTTGTGAG GTAGGGGAGA CTATTTTGT GGTTCAGTCA CTCCAATTAT TGCCACAATG CACTTTCCTT CATAACTGCC  
 CCACCAAGG TCTTAAAGC CATTTTGGG GCCTATTGCA CTGTGTTCTC CTACTGCAA TATTTTCTA TGGGAGGATG  
 GTTTTCTCTT CATGTAAGTC CTGGGAATTG ATCTAAGGT GATGTTCTTA GCACITTAAT TCCTGTCAA TTTTGTGGT  
 CTCCCTTCT GCCATCTTA ATGTTAAGCT GAAACCTGGG NCTACTGTGG CTCTAGGGG TAAGCCCAA AGGCCAAAA  
 AA

SEQ ID NO:1916: (Length of Sequence = 382 Nucleotides)

GAAATGAGAC TTTATTCTGA AATTATTAAA AAGAACAGAG ATGCTCCATT TGGCTGCATG CAGGGGGGGC GGTGGGGGG  
 ACAGAGGGGA GGACAGGGG TCAGCCAGGG GGACCGTGTCT TCTTCCAC GCAGGACACT GTGCATGGG CTCTGGGTGC  
 ATCTGCCCAT CTGTCTATGG GCCTGTGTGT GTGTNAGAGG CCAAACACAG AGAGCTCCGT GGGTCTGTGT GTATCCAAGT  
 GCTAAAAGGC AGGCTGGCTT TCTGGGGCCC ACAGCTGGCG GGCTAGTATC CTGGAAGGTT TCACTTGGTG GCTTGGCTTA

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GGGACCAGCA AGGGCTTGGN GTTGAAGGG GTGGCTCAAG GAAGCCTCTT TCTCCACTCA CA

SEQ ID NO:1917: (Length of Sequence = 375 Nucleotides)

GAGATTAAAA TAAACAACAC AAAATGTATT TAAATGAGAA ATTGAAATAT TAAAAATAAT ATTAGGTGAC ATTAAAACTG  
 TCATAGAAAT AAATGTATA TACAACAAAT AAATCAATGA TTGTTAAGTT TTTTAGACAG TTTGAATATC AGATTATAAT  
 GAATAGCATT ATTAGCCAGT AAAAAGAGCA TATAAATTAT TTTAAAATTC CAAATAAAAA TATTTAAAAT TTTGAAATTT  
 TGGACCCAAA ATTATGTCAG TAATTTTCATG AAAGTAGATC TCCAATAGGT CCTATATTCT AGACACTATG AAATGACATC  
 AGAAACCGTC AATTAAAGTG TACCCACAA GTGATACTA GCTACCATAC AAGTT

SEQ ID NO:1918: (Length of Sequence = 315 Nucleotides)

AATATACAGT ATGATACACT GATGTGCAGA ATGTGATTAG TTTATTAATC ATATGTGAAA ATATTAGTAG CTACATATGG  
 CCAGAATAGA TTTTYCTCTC TACAAATGTA AGTTAGTGTT GATAGAATTT GTTATGCGAT ATTTGGTCTT TTGGTTTCAG  
 TCTCAATGCT TTCTTCITGG CATTTTCATG ACTCTGTAAA TTAACCTCAG CATCAATTTT CTTTTAAATT CAACAGTTAT  
 TCAAATTGAT CGGAAATTAA ACTTGTATGT AGCTAGTTAT CACTTTGGGG GTACACTTTA ATTGACGGGG TTCTG

SEQ ID NO:1919: (Length of Sequence = 285 Nucleotides)

CAGAAGTAAA AGATTTTAT TGTCTATAG ACACTTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG  
 TTTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAAT  
 GATCAGTAAA AACATGCAAA AGTGNGAAG AAAGGGAAAA AGGTGCATTC CCTAAGCTG AGGGGGNTGG AATTTCAGAA  
 CAGAGGWWGC AGGGTGGACA AGTACCAGT GGCTCTCCCT TTCCC

SEQ ID NO:1920: (Length of Sequence = 181 Nucleotides)

GCAGGTTTAT TTTTTATTT ATGTATTNA ACTGACTTAT TTKTGTATCC CACTAGAACA ATACATTCAC AATATACTTG  
 CAGAACTKTG CCTGGSGCAT CAGGGGAGCA GAGAACTTT CAGTGAATA GTTTTGAAG AAAGGAGTAA AATCTCCCC  
 AAACCTTAAA GGCATCCTTT T

SEQ ID NO:1921: (Length of Sequence = 351 Nucleotides)

AGACGGGGTC TCACTCTKTC GCCCAGGCTG GAGTGCAGTG GCGCAATCTC AGCTCACC GC AACCTCCGCC TCCCAGGTTA  
 AAACGACTCT MATGCCTCAG GCTCCCGAGC AGCTGGGACC ACAGGCACAT GCCATCATGC CCGGCCAACC TTCTGTACTT  
 TTWAGTAGAG ACGGGTTTT ACTGTGCCAC ACAGGCTGGT CCCGAATCC CGACCTCAGG CGATCAGCTR CCTCAGCCTC  
 TCAAAGTGCT GGGATCACAG ACGTAAACCA CCATGCGGGG CCCAGTCTT TTCTTCAGAG GGCTCCTNAG CACCCCAAC  
 CCCAAACCTG AGGCCTGTGA GAGTCTATCC G

SEQ ID NO:1922: (Length of Sequence = 198 Nucleotides)

CCTCATCTGG ACACAGATGA TTTGCCAAG AAGCGGCTG CCCAGATCTG CAAACCTTGC AACCCAGCAC TCTTGCATAT  
 CTCGCTTAGC GTGTCCACAA CTGGGATGCT AGCTGGCGTA AAGATGCTCA CCAGCCACC AGTGCTCTG CCGTCCATAA  
 GTGCAGTGIG ACTTACCCTC TGAGAGTGGC ATCTGCTG

SEQ ID NO:1923: (Length of Sequence = 303 Nucleotides)

TTGATTTGCC TATGGTGTGA AATCCTTGT TATTTTTCTA AAAAAATAAA ATTTAAAAAG AAAGAAAACT AAGGAAGAAC  
 AAGANGCTAT TTACCCAAAG TGAGCTTNC A GTTTAGTTT TGCATGGCTG TTGACTGCC TTTCCGCCCT ATGAAATCA  
 AGAAAATCTT TTTTAAAAAT GGAGTCTGCT TATTTTCCAC TCCTTGACAG TAATACAAAT TCAGTTTGTG AGGTTGGATG

GTGAGTTGGG AGCTGTGATG GATCTGTTGG CGGGTTTTGG ATGTGTAAAG AATGATATAT ATA

SEQ ID NO:1924: (Length of Sequence = 231 Nucleotides)

GTCTTCCCTG ATTCICAACC TTGCAACCT GCCTTCCGTC ACTGCTAGGT CCACGTAGGC TTAACCTTGA TCTTATATGT  
AGGACCGGTC TTCACCTTAA GCAAGAGAAA TGTAAGAAGT GNTTTCCTAA CTCAGTTGCT GGCCAGCTT TGGCCTCGTG  
TTCCCTTTCT GAGGACTGAC CTTTGGTATT GCTCTGGAGT CTCATATCCC CTTTGGCCCT AACTGACCAC G

SEQ ID NO:1925: (Length of Sequence = 249 Nucleotides)

GTITTTACTT AACCATCTTA TTGTTGGGAA TTGGGTTTCC ACTTTTTTNT TATAGATAGT GGTGCASTGA ACATTTTTTAA  
ATAGCTTTTT NCTTCAGTGT AATTATTTCC NTAGAGAAAG TTACCAAGAG TGGTTTTACT AGTTCAGAGG GCTTCAGGAT  
TTINATGGCT CTNCTAGCG GTGCTCTATT ATCCTNNAGA AGACTTGTAT TACTTCCAGT GTCAAGAAGG TTGNCTTCC  
ATGGAATGG

SEQ ID NO:1926: (Length of Sequence = 367 Nucleotides)

TTTTTCTCAG CAAGGAACAG TCATGAGAAA GAGAATGCGT TCCTAGGGGG AGGTCTCTAA AATGGCCACT CTGGGACTGT  
CIGTCTTATA TGGTTGTGGA TAAGGGATGA AATAAACCCC GGCTCTCCCT AGCGCTCCCA GGCTATTAG GACGAGGAAA  
TCCCGCCTA GTAAATTTA GTCAGACTGG TTGCTGTTC TCAAACCTG TCTCTGATA AGATGTTATC GATGACAATG  
CATGCCTGAA ACCTCATTAG CAATTTAAT TTCGCCCCGT GCTCTGCCAT TTGCCTTGIG ATATTTTATT GCCTTGIGAA  
GTATGTGATC TCTGTGACCA CAACCTATTC GTACANITCC TCCCTT

SEQ ID NO:1927: (Length of Sequence = 231 Nucleotides)

CTTTTATGG GGGCGGATAC CGCAAGGGCC CGCCACGGT CAGGTIAGTG TCTGCTCTT GCAGAGGCGC KACAGCCTGA  
CACCTCCACC TGCCACCCGC CCGGGGTTAG TGAACATGC AAAGCTCAGA GGGTGGAGGC AGGGGTGGTC GCTGCTGAGA  
CCAGGGCTGN GTGCAACAGG AGGGTCAGCA CAGAGCCTGG CTGGTGTCCC TGGGCCCAA GGGGGCTGG G

SEQ ID NO:1928: (Length of Sequence = 283 Nucleotides)

CCCCTTGCTT CCCCTGAGCC CAGGTATGTA ATTCCTACAC AACTGATOG AGCTTGINTG TGTGTGTATA TGTGTGTGTG  
TGTGTGINTT AATGTGACAT GCATGTACTG ATCCNGAGAA GCCTTTATAC CAAGAAIAGA GCTGGGATCT CAAGCCCACC  
CTCCCAAGAT CAGACAGCAG AGTGAACCAG GAGGCCACGA CAGGCCTTGT GTCARATGGC AGACGNTGCA GCAGGAAGCA  
GAACCACGGG ACGGGGRNCA TGGGATGCTA TKGGCAGCCA GCT

SEQ ID NO:1929: (Length of Sequence = 287 Nucleotides)

CTAGGAAGTA GGGAGAGAAT TTACTAAGTA AGGAGAGAAA GGAAAAAGAA CAAACATGGA ATATGNTCAA GCAAATAACT  
TCCAACAGAA ACAAGANGAT ATGTTTTAAA ATATATTTCC CCTGCCAAT AGTAAACTT ATTTACGGCA CAATGCATTA  
CTGAGGTGAA ATTAAAGTTA CATAAAATTG AAAACATCAC ACTGGANAAC ATTTTCATGG GCTCAACTGA AGGTGGCATA  
GTCCAGGAAG GCATTTGGAC ATGTATGGGG TGTTTTCTTG TTGCCCC

SEQ ID NO:1930: (Length of Sequence = 357 Nucleotides)

ATGGAACACT ACTGCAACAG CTCACAGAC CGGCGGGTTC TGCTCATGTT CCTGGACATC TGTTCAGAGC TGAATAAGCT  
CTGCCAGCAC TTGAGGCGG TGCACTCTGG CACCCAGTC ACCAACAACC TCCTGGAGAA ATGCAAAACC CTCGTTAGCC  
AAAGCAACGA CTTAAGCAGC CTCAGAGCAA AATACCCTCA TGATGTGGTG AACCACCTCA GCTGTACGA GGCCCGAAGC

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CACTACGGCG GCGTGGTCAG CCTCATCCCC CTCATCCTAG ACTTAATGAA AGAATGGWTC GCCCACTTCG AGAAGTTGCC  
GCGCAAGGTG CTGCAGGGCA GCGGGGCTGC CTGCACT

SEQ ID NO:1931: (Length of Sequence = 343 Nucleotides)

ATCACITCCC CACQCCACAG GATCTGCCCC AGAGAAAGTC CTCGCTCGTC ACCAGCAAGC TTGCGGGTGG CCAAGTTGAA  
TGATGCTGCC GGGGGCTCTG CCAGATCCTG AGACGCTTCC CCTCCCTGDC CCACCCGGGT CCTGTGCTGG NTCCTGCCCC  
TTCTGTCTTT TGCAGCCAGG GGTGAGGAGG TGGCTCGGGT GTGGGCTGSA GAGGCAGAAG CCCTTTCTCTG TTGGTGTCCC  
AGCACATGGA GCCCCTTGGG CTGAGCACCA AGACCTTGAA CCTTTTTTGT TTTACCTTTT TTCCAAATAA CAGTTTGGAG  
AAATATCAAT GAAATCTGGG GGT

SEQ ID NO:1932: (Length of Sequence = 314 Nucleotides)

TTTCATGGGT TTTTGTTTTG TTTATTTTGA ATACTGAAAA AGTCCTTTGG GCTCTGTGGG GTTCCCCACG CTCACGGCTC  
CTTTCTCCA CACTCACTGC CCTTCTTCCC ACAGCAAATC TATTTCAAGG ACASTACTTT TTAAATGAT TAATGTTGAG  
TTCTCAACTA GCTCTGCAGA ACTAGAGGAG CTGTTTGCACT CTGTCTGTGC GGATGGAGTT TCTTTTATCT GACACCAGGT  
CTCCAACCAC ACTGATGCAA GGCATTTTAT CTACAGAGCT CAACTAGAAC CCCTTTTTTCA TTAGGCTACT CCAA

SEQ ID NO:1933: (Length of Sequence = 378 Nucleotides)

AGCTTCCTGC GGGACCACAG CTATGTGACT GAAGCTGACA TCATCTCTAC CGTTGAGTTC AACCACACGG GAGAGCTGCT  
GGCCACAGGT GACAAGGGCG GCGGGGTCGT CATCTTCCAG CGGGAACCAG AGAGTAAAAA TGGGCCCCAC AGCCAGGGCG  
AATACGACGT GTACAGCACT TTCCAGAGCC ACGAGCCGGA GTTTGACTAT CTCAGAGCC TGGAGATAGA GGAGAAGATC  
AACAGATCA AGTGGCTCCC ACAGCAGAAC GCGGCCACT CACTCTGTT CCACCAACGA TAAACTATC AAATTATGGA  
AGATTACCGA ACGAGATAAA AGGCCCGAAG GATACAACCT GAAGGATGAA GAGGGGAA

SEQ ID NO:1934: (Length of Sequence = 239 Nucleotides)

ATTTAAATTG ACAGCCTTCC ATTTTTCGAG AAAGTACAAA CAGAACTGCT TTAGCACCCA TCGAGCCCCA AACGGGTAAG  
GTAAGCCAAG GTTTTAAATGA CCAGCCAGT ATCTAAGCTT CCAAACGGAT GCCAGCCCAT CACATACTYA CCTTGGGAGG  
CTGCTGCACG GGCATCTTCC YGATGCTCAC GGCACITGGK GTAGGTTTCA RGATCGCCTC TTTGAGGAAG GACTTCAGG

SEQ ID NO:1935: (Length of Sequence = 319 Nucleotides)

TTAATTTTTT TTTCCCATAG AGGAATAGCA TTACAGTCTA ACAATCAGAA TTCTGTTACA CACATACACA GGCATGCCAC  
ATGACCCAGT TGAGGTGGTT GTNTCCITGA GTCTGTGAC ACGTCACATG GTCAAAGTCT CCTCATTTCA GCCAGTCTCA  
ACACAAAACA CCCAACAGGG ATGCACTCAA CTGTGTGGTT CCATGTGGAA CTAGGTGGCA GGGCGAGAGG GAAAGTAGTA  
GAAGGGGGCT ATGGTGTGTC TGCATTCACT CCCCTCATAT AAAGCCACAT GGATCTAGG GGGGTATCCA AGAGCTCTG

SEQ ID NO:1936: (Length of Sequence = 415 Nucleotides)

CTATTTTAC AAATTATACC TAATGAGTAA AATTAGTGA AAGTGATAAC ATGCTTCTAC CTGTATTTCT AGTGACCCCT  
TAGCGGCAGG TATTTATACC TGGTATTTAT GATGCAGTAT ATAAGTGGTG AACATAACT GACAGTATTG TGCTTGCTGT  
ACATGCTGCG TCTTTTGAAA CAGATTTTAG TAAGCATTTT CCAGAGGTAA AACTGTGTCC TTATTCTAAT TTTATTCCTA  
GGGCAAAGTA GACAGGGATT ATTTCCITGA ATCTATTTCC AAATTAATAT TTTTTCCTT GGTATTTCTA CACTTTAAGG  
CCATTTGGTG CAATTTAGAA AGTGTGGGCC TCCCTCCGC TAGCCACATT CAAAATTAAC TTCCAAAACC TCAGGAACAG  
TACAAGGAAT TTGAA



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SEQ ID NO:1937: (Length of Sequence = 393 Nucleotides)

TCACTCTTGT CACCCAGGCT AGAATGCAAT GGCACAATCT CGGCTCACTG CAACCTCCGC CTCCCAGGTT CAAGTGATTC  
 TCCTGTCTCA GCCGCCCAAG TAGCTGGGAT TACAAGCACT TACCATCAGC CCCAGCTAAT TTTTGTATTT TTAGTAGAGA  
 TGGGGTTTCA CCATGTTGGC CAGGCTAGTC TCAAACCTCT GACCAGCGGT GATCCACTCA CCTCGGCCTC CCAAAGTGCT  
 GGAATTACAG GCGTGAGCAC CGCGCCCAGC CTGINTTTCA TGTTAGATCA TAATATGATC TCACCAGATC CTTACTGAAA  
 ATGTACCTTA TTACAAGTAG CTAAATTTCC ACATAGAGGG NTAAAAAGAT TGGGAATCA GGTATGACT TTT

SEQ ID NO:1938: (Length of Sequence = 407 Nucleotides)

GGCTCCCTG TCGGGTGCAA TGCACTGGCT CAGATCATAG CTCACTGCAG TCTCGAACTC CTGAGCTCAG GCAGTCTACC  
 TACCTCANCC TCCCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGCGCCCA GCCAGAACAT CTGTTTTTAC ACCCAGAGAG  
 CGCCCTCGT TAGGACAGAA CCACGGTGCC CAGAGCCAGG AAGCCGCCCT CCTGGCGCCC AGCATCTGAG CTTCTACAG  
 TGATGGGCGG GCTCAGGAGA GGACAGGGAG TCGTGGTGA AGTTCCACAG CTGGCCGCGT GGGGGGGCCC TTGCACCGCA  
 CTTGCCGCCCT CTGACTGCC CGATCCCCG CAGCCCTGT GCGGATTGC ATTTYCTCC TTTCTYCCAG GGTACTGGCC  
 CCAGCAA

SEQ ID NO:1939: (Length of Sequence = 412 Nucleotides)

GACATGCCAC CACACCAATT AATTTTTTGT ATTTTCAGTA GAGATGGGGT CTCACGATGC TGTCTGGGT GGTCTTGAAC  
 TCCTGAGCTC AGGTGATCCA CACTTCGGCC TACCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGCGCCCG GCTAAAAGAA  
 AGGAGATTCT AATGCATGCT ACAACACCGA TGAACCTTGA GGACATGACG TTACGTGAAA TAAGCCAGGA ACAAAAGACG  
 AAGGCTATAT GAATCCACTC ATATGAAGTA CCTCGATTAG CCAATCCAT ACAGAAAGTA GAACAGTGGT TGCCGCGGGG  
 AGGGGGAAAT GGAAAGCCTA TATTTAATGA GTCCAGAAGC TTTTTTTTGG TTTTGTTTT TAGACGGAGT CTCGCTCTG  
 TTGCCCAGGC TT

SEQ ID NO:1940: (Length of Sequence = 421 Nucleotides)

ATCCATCCCC TTGCCCAGG CCTCATATGC CCGCTCCCC CAACCGGTCC TTCCCCTTGG GCTGCCGGTG CAGCTGTGGG  
 CCCAGGCTTT GGCAGSCCA GCTTCAAGAC AGTGGGACAC AGAAAACACT TTGCAGCATC GCCTCTCCCT CCGCCACACC  
 CAGGTCAGCA GAGATGGGCC CCCACCGAG AGATCACAGC TCTGGTACAG GGAGGTGGGC AGGGTTGGAG AGGAATGGAG  
 AGACATGTCA CCTCTATAGA AACGCGTCCA AAGTACAAGC TAAGCAGGGG GAAGGAGGAG GGCCAGAGAG CAGCCGAAA  
 GAAGAAAAGA GGAACACGGC AGGGGGTTCT KGGGGAGGAG GCCTCACAM CACCCCGCAG ATGAGCGTCT TCACCAAGAA  
 GGTGTTCTTC GAAGTKCGG T

SEQ ID NO:1941: (Length of Sequence = 377 Nucleotides)

GTCAGCTCTA GAGGCACCT GCATCATGCC CACCAGGGTG ATCCCCCTGG GATNGACCAT CTCGGGATAT GAGGCCTCGG  
 AGGCTGGGGT TGAGATTTGG TCCTGAAGAG CTTATAGCCA GATTGCCACA TTCAAGTGTA AGTCCAGGAA AGGGGCAGGC  
 GGCAGTGCAC AGGGATTTAT CAGTTCAGCA ACCTCACAGT GATAAGAGGC TTAGAGAGC ATCTAATCGA GACCTTTAAT  
 TTTTCGGGGA GAGCAGCTGA GGCCGTGTGG AAAATTAGTG GAGAGCTGAC AAGTGTCTTG GCTCCTGGCC CAGGGGTCCG  
 TGGTCCANCA CGTTGTGTT CAGTTGAAG CAAAGGGCTT GCCCGTGATT ACCTTCC

SEQ ID NO:1942: (Length of Sequence = 401 Nucleotides)

TGAGAACATT AAGAAGGACA ACAAATTA ACATTCTTTA ATAAAATTCC TATAGAAAGC TCAGTCATAG GGCAAATACT  
 CATTTCTCTT TCCCATATCA CCGAGGATTG AGAGTCCCA ATATTCTTTG GAGAATAAGC AGTAGTTTTG CTGGATGTTG  
 CCAGGACTCA GAGAGATCAC CCATTTACAC ATTCAAACCA GTAGTTCCCTA TTGCACATAT TAACATTACT TGCCCTAGC

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ACCCTAAATA TATGGTACCT CAACAAATAA CTTAAAGATT TCOGTGTGGC GTGAACCATT TCAATTTGAA CTAATATCCT  
TGAAAAAAT CACATTATTA CAAGTTTTAA TAAATACAGT AGAGAGCTGG CATTTTCTA AATACTGGAT TTCAGATCTG  
G

SEQ ID NO:1943: (Length of Sequence = 351 Nucleotides)

CAACTCAGGT TAGCAACTGC AGGAAACTT TCTTCATTTT CACTGAATTT TAAAGAGAGA ATCCTGTCTC TATTTCTCAG  
AGAACTTAG GTGAAAAGTA AAAGAGAGGC AAAATCTCTT TCCTTCATGA GATACTTTTA TTTTATCTC TTTCTCTACT  
CATGTGCTTA ACTGGTGAAA TGATTCTGTA GAAATAGATC CTTCGTATTC TGCACTCAT TCCCTTATGG CAACTACAAC  
AGGAGGAATC CAGCTGGAAA TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCGGAGCGC CGTGTGGGC  
TCACTCACTC TGGCCTGCGC ACTGGGGTGG T

SEQ ID NO:1944: (Length of Sequence = 406 Nucleotides)

CCCCAGGCTG TCTCAGAATC TTGATGGGGT GGTCAATTGAG CTCTCTTCC GCCAGAGCAA GATCAGTGAA GTCCTGGGAG  
GCAGTGGCTA CAACTCGGAC CGGCTCTGCC TGCCCTACAT TCCTCAGCTG ACAGATGAGG ATCGTTTATC CAAGAGGAGG  
AGCATTGGAG AGAACATCTT CCCTGAGGAT CCCGAGGATG GTCTGGTGAA GACCAACATG GAGAAGCTGA CCTTCTATGC  
CCTCTTAGCT TCAGAAAAAC TTGATCGTAT TGGGCGCTAC CTCTTTGAGA GGCTCATCCG TGACGTGGGT CGNCATCGAT  
ATGGGTACGT GTGCATTGCT ATGGAGGCTT TGGACCAGCT GCTCATGGCC TGCCACTGCC AGAGCATCAA CCTCTTCGTG  
GAGAGC

SEQ ID NO:1945: (Length of Sequence = 362 Nucleotides)

TCAAATTGTG AAATTNAGAA TTCTGCTATG ACAAGTGGA AATTGAGAAA AGACGCAGAG CCACTTTTIG TNATCGTGTA  
GGTGACAAGG AGTCTCCCAA GTATATCCTG CTAATAGGAG TAGCTCTCAA AAGTTAATCT CAATAAGCC TCCTAAAGTC  
TCTGGCAAAG AAAACTGCTG CAATCCCTTG TGCAATCTC CAGACTAAGC TGTATGSGGG AAGCCTACCT TTTTTCAGCC  
CGAAGTTCAG GAGACTGAGG ATGTAAGTGG GGACATGATC ATTGNITCAA AGGTGATTGC TTAAGTATCT TAAAAATGTA  
TAGAGCTAAT CTGAGTACCG CTTAAATTCA AGAGCCGTGG CT

SEQ ID NO:1946: (Length of Sequence = 408 Nucleotides)

AACCTCTNAC CCCAGGTTT AAGCAGTCTT CCCACCTCAG CCTCCCGGGT AACTGTTCTT TGTAACCTCTC TCATCATCGA  
GGCTATATAT TAATAGACAT GGTATTAGC CCACACGAAA CATTGAGAAT TAGAATTGGA TTAAGAAGAC GCGTTTGGC  
ATCAGCTGA CTACTCTCA TCTCGTCTT CGGGGAGGGT GATGCCAGCG TGGGACTCTT TGGAAAGCCT ATCAATCACA  
GGTGGCTAA AATCAAAAGG TGGGTCAGTA GGTAGGGAG GNGGGCGGA AAGGAGATGC CAGCGGGTGT TAAGAAGGAT  
ATGGTCAGAA GAGCTCTTTG TCTCCATCCA CGGGCCTCT GCTCAGCCCG TGTTGTCTCG GTGAGTAATT CGGGAGCAGT  
GCACGGCT

SEQ ID NO:1947: (Length of Sequence = 426 Nucleotides)

CCATTTGACA CTGTTACTAT CTGCAACAGT TCTTGCACTA GAGGATGCAC TTCAAAGTGC ACTGCTTTAC TGTCTCACTG  
GAATTCIAAA AATCTAAGCT TTATCTTTTT AACATTAAGC TGTGTGGGAA TGTAGCAACC TCCTGGGTGG TGGGGTGGG  
GGCATCTTCA ATTATTAGG TCTCACTGGA AAGTTTGAGA TCAGAGTTTG GTAGGTGGTG TAAGGGGACA ATGAGTAAGG  
GAGAGAAAAT ACAGGACTGA CTGGGGGCAA AAAACGCTG ATAATAATTT GTGAAGCACA TTTTCAAACCT CATTTATCC  
TTACAAGGAT CCTAAGAGGC GGGTATTATG TCCNGTTTAT ACCTGGAGGC TTAAATTGAA GGAACATCTN CAAGGGCACA  
CAGTTTAATG AATGGCTGAG GTAGGA

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SEQ ID NO:1948: (Length of Sequence = 349 Nucleotides)

TTACAATCTG GCTGGAAACA GATAATTAGA ACATATCACC AGAAACAGAA CAGTTAAGTG CCAAGCTCTG GTGGAGGTTT  
 TAAGTGCCAG AGGTCAGGAT ATATTTTAA GIGCTTCTGC TTCCAAACAT CACTCTTTCA AAACAAAACA CAAAGATCCC  
 CAACCAGCAT TTCTGCCCCC TGAGGCACCA GCAAGGTATA TAAACGGGCT TGCAAAGTTT GATATACGGT CTCCAGCCTG  
 GCTTTCTTTA GTCTGGGCTC AAAAGCCAGA AACCTCTGGG GGCCAGAGAA GCGCTCTTTG TTTGCCAAAC AGCATTCTCG  
 CACATCCTGT TCTACAGCAC CGTCAGTT

SEQ ID NO:1949: (Length of Sequence = 378 Nucleotides)

TTCAATCCTG ATTTTATCCC AGCTGTGGG GATATTGATG CATCTTTAA GGTCCCACGT CCTGATGGAA AGCCTGACAA  
 CCTTGGCCTA TTGGTATTGG ATGAACCTTC TACAAAGCAG TCAGACCCCTA CGGTGCTCTC ACTCTGGTTA ACAGAGAATT  
 CTAAGCAGCA CAACATCACA CAACATATGA AAGTAAAAAG CCTAGAAGAT GCAGAAAAGA ATCCCAAAGC CATTGACAGG  
 TGGATTGAGA GCATCTCTGA ATTACACCGT TCTAAGCCCC CTGCGACTGT GCACTACACC AGGGCCATGC CCGACATTGA  
 CACGCTGATG CAGGAATGGT NCCCGGAGTT TGAAGAGCTT TTGGGCAAGG TAAGCCTG

SEQ ID NO:1950: (Length of Sequence = 357 Nucleotides)

TCCTAATCTT TACGAATGAA AGAAACAAT TCCATCCCTC TCACAAAAG GACATCTTTT AAGCTTTCTT CCCAATCTAA  
 CCTCCATGGG ATCTCAGAAA TTCCAATTCT TATAACTCAA ATCCCACAG TGGTGTAGAT GCATTAATCT CCCGGGGACA  
 GCAATCTGAG GCAGGCAGGT TCATTAAACA AACATGTTCT GTGCCCTCTG GCAGAGAGGG CAGCAGGACA TGCCTGCCCC  
 CTGAGCCAAG CTGTGGCATG GGCAAGGACA TCAAGTAGCT GACAACGGTC TGTCCATCTC AGCTGGGGCA GAGGGGCCAG  
 TTCAGCCTTG AAACAGCAGT TNGGGAGTGT CTCAGCT

SEQ ID NO:1951: (Length of Sequence = 336 Nucleotides)

CTATCTCCCC AAATCTACGT TTCACCATTT GACTGTATAT TTTTITAGCC CAAGCCACCT TTATGTCACT CCTGGAACAT  
 AATAACTGCT TTCTCACTCA TCTCTACAT TTINACCTCT TATAATACAG TCCACCTGT ACOGAGCAAC AAGAGTTATC  
 TTTCTGAAAT GCATATTAGA TCATGTCACA TCTCTACTTG AAGCTCTCTA AAGATTCTC ACTAAAGCG AAGTCTAAAA  
 TTCCACCCA GACCTATAAG GNCCTTAAAT GATCTTACCT CTCTACCTAC CTCINCGATC TTACCTATCT TCAACCTGGG  
 TTCTATTTTC TATATC

SEQ ID NO:1952: (Length of Sequence = 413 Nucleotides)

CAGTATGTAA TTTAATCAGC AAATGCCCA TTTCATCTC TACCGGAAAG CTTTCAGAGC CATTCOCAGA TCAGACAGAG  
 GACTAGGGTT AAGGCTGGGA ATGAAACACC AGCTAGTATC CAGTGAGCT TTCCCAAACA CACATACACA GCAAGTCAGA  
 CTAAACAACG TCCAACGTAA GACTCACCTC AAATACTTAG ACCTAAGATT CAGTCCAGG CTCTTTCAGA TACACCAGGT  
 AAGTAAGCAC TTGGCATTCC TATCTCAGCC ATTCATCTCA CAGAATCTTT TGGGTGCTA CTGTGTGCC AATACTGTGC  
 TTAGTGGTAC TTGCCCTCAG CAGGAAAAAA AATTAAAAGT GTTAAATGTT ATGAAGGAAC AGATTGGNAT AGGAATCACA  
 AGGCATTGAG GTC

SEQ ID NO:1953: (Length of Sequence = 382 Nucleotides)

GTTTCACTCT TGTGCCCCAG GCTAGAATGC AGTGGCGATC TTGGCTCACT GTAACTCTG CCTCCGGGT TCAAGTGATT  
 CTCTGCTC AGCCTCCCTA GTAGCTGGGA CTATAGGTGC ATGCTGCCAC ACCAGCTAA TTTTITGTG TTTTITAGT  
 AGACAGGGTT TOGACATATT GSCAGGCTG GTCTTGAAT CCTGATCTCA AGTGATCTGC CCACCTAGGT CTCCCAAAGT  
 GCTGGGATTG CTGGCCTGAG CCACCGCACC CTGCCTAGAA CATGCTTTTIN AATAGTGTCT CTAACCATCA TGTITAGGGC

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CTTAGTGCTT ACCTCTTAAA GAAGGGCTGC TGTGAGGAT TCCNTGAGAT AGTGTGTTGAA AA

SEQ ID NO:1954: (Length of Sequence = 389 Nucleotides)

GGAAAAGCGG GACCCAAACA GTGGTGCTGG GGAAATTTGT TCCTGTTCCC TTGGAAGGC TGAGTGGGTG ATGCAGCACA  
GGAACAAGGC TTGGACGTCA GAGGTCTCAT CTTCACTGTG ACAAAGCATA AAGGACTTGG GGTTGAGCGT GTGTNTGGGC  
TCAAGTGACC ATGCAAGTNC TGTCACTCC TTCCTAAGAC CCCATCCTTC TCCCAAGTCC TCCACAAGAG CTACCTTCTT  
CAAAACAATA ACAGAAACAC ATCAAGNTTN GCGTCACTGA AATTGAAGTT CTGAATTCTG CCGTCACCCC AGCAACAGTG  
CCAGTTATGA TGAGACACTT GACCCAGCAC TTGGGTTGAT GTCTTTGGCT GTTACCGTGG CACCTAGGT

SEQ ID NO:1955: (Length of Sequence = 277 Nucleotides)

GCCTCTAACT CCACGGCTCA AGTAATCCTC CTGCCCTCAGC CTCCTAAGTA GCTAGGACTA CAGGTGCACA CCACCACACC  
CAGCTAATTT TTTTNCCTTT TGATTTTGG TAGAGATAAG GTCTACTAT GTTGCCAGG CTGGTCTGAA ACTCCTGGCC  
TCAAGTGATC TGTCTTAGCC TTCTGAGTAG CTAGAAGTAG TTTTAATGAC CTAAGAATT ATGTGTTTAC CNGTGATTTT  
ATGTGTTTGG TTAAGACATT CAGAATTTAG AGAAATG

SEQ ID NO:1956: (Length of Sequence = 380 Nucleotides)

GTGTAATGTT CTGAGGGTGG CGAATGCAGG GCGCGTTCC TCCCGCTGC GATCTGGAAC ATCTTCTCGC CAACAAAGAG  
CAGGTGAAG ATGAGGGCAA GCTGGTAGAC AGCATGGCCC AGGATGTTCT TCATCATGGT CCTGGAGATG AGCGGCTTGT  
TGCGGCCGTA CGGTTTCTC AGCAGCAGGG TCTCCGTGGG CGGCTCAGTG GCCAGTGCCA GGNAGGCAA CGTGTCATG  
ATGAGGTTCA CCCAGAGCAT CTGCACGGCC TTCAGAGGGG AGTCTGCGT GATGCAGGCG CCTNTAAGC CACAATCACG  
GCCACCAGT TGACGGTGAA GCTGGAACCT CAAGAATTIN GAGATGCTGT CATAGACGTT

SEQ ID NO:1957: (Length of Sequence = 328 Nucleotides)

TGTGATGTTT CTTTTTAGC CTGTGATGT GGTAATTGT ACTGATTGAT ATTTGAATAT TAACTGGCT TTGCATCCCT  
AGAATATACC TCACCAGGTC ACTGTGACT AGGTGGTGC AAAAGTGCTT GCCATTTTGG ACCATGAATT TTGAATCATT  
AAAAGTAGGC TCAAACACAT CTGTATTAAT CAAAGTAAGA ACCATTACAA TCAACACAAT TTGCGCAACA AGAATAAGT  
TTGTTTACTC CTGTAGCATA AAAATCCGTG CTTTGAGATT CGAGGAACCT TTGGNAAGCA CTTTCTGCAT CCTGCTGGTT  
GTGGAAGC

SEQ ID NO:1958: (Length of Sequence = 254 Nucleotides)

CTAGAAAGTA TCTTCTCTTT ATTTAAGTTA AACAAATTTT AAGGATGGTT TCCATCTATA AAATGGACAA AGTACAAGCT  
CTGTACAGCA GTTCTTTTAA AAAATCAACT GGAAAAAAA ATTACCAAC TATATTTTGA ATTTGCAAAA CATACTCACA  
GATACCATCA TCTGAGCTTT TATGAGNCA TAAGAAAGN CCACCACAGA GAAGACAACCT AACTTCGGCA CGCTTGCTC  
GAAGGGCTCT TAGG

SEQ ID NO:1959: (Length of Sequence = 259 Nucleotides)

GTAATACGAG AAAAAACACA ACAGAGTAAT AAAGATATAA AACTTTTACA ATTAACACTC ATCAGTGTGA TAACTAAGC  
CCATGTAAAA GTAAAAATCT CTCACAGTTA ACAAACGTCT TTACTTTTAC TAAGAAGGAA CTGAAATTAA AGTCTTATG  
CACTTTGGAG GTGGCTGCAA AAGCTCACA CATAGTTGAT CCTTAAATA ATTATGAATG GCAACCAGTG CTGCTTTTCT  
GTACTCAACC ATGCAACTG

SEQ ID NO:1960: (Length of Sequence = 329 Nucleotides)

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GACTACAGGT GTGCCCCACG ATGCCTGGCT AATTTTAAAG GTTTTGTAG AGATGGGGTC TTCTATCTT GCACAGACTG  
GTGTGGAATT CCTAGCTCAA GCAATTTTCC TGCTCAGCC TCACAAAGTG CTGGTATTAC CGTGTGAGC CACCGTGCTC  
AGCCCAGTCA TGTATTCTTA ATTATTGTAT TTGTGAAC TAATATGAAC AACAAAAACA AACAAACAAA CAAAAAGGGT  
GGCATTCTG GGCACCAGG GAAGGTGGGA TTGGGGTTGC AGCTATTTTC AAATTATATT AAAAGCAGGA TCCAGTTAG  
AGCGCTATC

SEQ ID NO:1961: (Length of Sequence = 282 Nucleotides)

ATCCTCCAC CTCAGCTTCC CAAAGTGGTG AGATTACAGG NTCAGCCAT CGCACCAGG CCAATTATTC TTTCTAAACC  
ATTTCTCTT CTGTGTCAT GCCTTAAAA ATAAATTAA AAAAAAAAAA AAAAAAATC CTAAATTT CTCAGGTGT  
TTCCATATCA TTTTATTATC AAGAATATGG CTAATCAGAA GTCACAGCCA GCCCCGAAC TACAACATA AACATGAT  
ATTATAGGCT AACTGAGGG ATTCTGAGG TTAGCAGATG CA

SEQ ID NO:1962: (Length of Sequence = 328 Nucleotides)

TGCTGGTGT CCTGCTGTCA TCCTCAGGAG GCCAATCAG TCCAGCCTC TCCACCATC TTCCCTGCAG CGATTCTTC  
GAGCTCGAAA CATCTCTGGC GTGTCTCTGG CTGACCACTC TGGTGCCTTC CATAACAAAT ATTACCAGAG TATTACGAC  
ACTGCTGAGA ACATTAATGT GAGCTATCCC GAATGGCTGA GCCCTGAAGA GGACCTGAAC TTTGTACAG ACCTTGCCA  
GGCCTGGCA GATGTGGCCA CGGTGCTGGG ACGTGTCTG TATGAGCTG CAGGAGGAAC CAACTTCAGC GACACAGTTC  
AGGCTGAT

SEQ ID NO:1963: (Length of Sequence = 277 Nucleotides)

CCAAGAGACA CCCCCGCAC TCCTGTGCCC GAGCTGTCTC ATCTGTGATT CACAGTCTGC TCTTCTGGC TGCTGTCTG  
GAGAAGTGAT TTAAACCCC GAGGTAGAA AGGGAGCTAT TTTTGAGCTG CTTTTGTGA AAAGGCAAT TTTCTGCTG  
GGACTGGCTT TACCCGCTT ACCTAAATCA TTTCTTACTG CCTCTGTAA CAGTCGCTT TTGTGTCTG CTGGNATTG  
TTTGAACACA GTCCACAGG TCAGTGGTTN CATCTCT

SEQ ID NO:1964: (Length of Sequence = 230 Nucleotides)

CAATGCAACC TTTTAATTCC AAGCAGAGTC CCCCTCCCC AGCATGGTCA CACACACAGT GGAAAGGGAT GTCAGGGTCT  
GGGCAGGAGC AATACCCAGA CCTGGGCAA AATATAGATA TCATTATATA CACAGTGA CTTGAAAGAA GTCAAGCTGG  
GGGTGTAAGG TAGGGCAGG GCAGGTGAGG AAAGCAGCTG GGGGGCCCC AATAAATTAC ATTCTTGAGA

SEQ ID NO:1965: (Length of Sequence = 299 Nucleotides)

CGCGTGGAT CCGAGAAGG CACAGCAGAT GCGCTCCAG GTGCATACC ACCTTCAAGT GATTGAGGAG AGGGTGAATC  
AGAGCCTGGG CTGCTTGAC CAGAACCCC ACCTGGCTCA GGAGCTGGG CCCCAAATCC AGGAACTCCT CCACTCTGAA  
CACCTGGGTC CAGTGAATT GGAAGCCCT GCCCTGGG GCAGCAGGA GGACAAGGGT GGGCTGCAGC CTCCAGATTC  
CAAGGATGCA GACACCCCA TGACCTTCC AAAAGGTCC ACAGAACAAG ATGCTNCAT

SEQ ID NO:1966: (Length of Sequence = 320 Nucleotides)

GTCCCTGCAC ATGCGTCTGG CAAGACGGT CAGCTTGTG GTCTGAAGCA GGAAAGTTTG TCTGTNCTTA GCCAGTAGCT  
TGGCCCTGTT GGCGCTGGT GTGTAAGGAG AGAGACTTG AGCTTCAGGT CTGGATAAAT NACCCCTTGA GTGTGGCTCC  
GTGGTGGCCC GAGTGGCCCC CTCAAGCTGA GTTGGGGTCT TCAGTCCCC ATACTTCTTC CAGTAGATCC AACAGGAAGC  
ACAGAGGCGG CACTGCATGT TAGGTGGGCC CCAGGCATAC CACTGAGCAG ACTGTGTGGT GTGGCAACTC TCACAAGTCA

SEQ ID NO:1967: (Length of Sequence = 296 Nucleotides)

GCTCTGCTGG CCGTGCAGAA GCTCATGGTG CACAACGGG AATACCTTGG CAAGCAGCTC CAGTCCGAGC AGCCCCAGAC  
CGCTGCCGCC CGAAGCTAAG CCTGCCTCTG GCCTTCCCCT CGCCTCAAT GCAGAACCAG TAGTGGGAGC ACTGTGTTTA  
GAGTTAAGAG TGAACACTGT TTGATTTTAC TTGGAATTTC CTCGTATTATA TAGCTTTTCC CAATGCTAAT TTCCAAACAA  
CAACAACAAA ATAACATGTT TGCCTGTAA GTTGATATAA AGTAGGTGAT TCTGTA

SEQ ID NO:1968: (Length of Sequence = 311 Nucleotides)

ACCCCTTCA CTCCCTCCA CCAGCTCTGC AGCCAGCCTA TGGCAATTAT ATTTAAGAG GTGTCCAG GACTTTGGG  
ACCTACTAAA ACAATGATGG TTATTTTGA TGATGATT TATATTATG TAGAGATATT TCTGGACCAC TCAAGCTCTT  
CGATACAAA ATCAGGAGCA TCTTGGGATT TATTAAATTA TGTAAGAAGA TAGCACAGAT ATCGGGATAT TATTGTGTGA  
AAATGCTGCT TTTACTTTGA TGTGATCTCA TTGATGTACA CAACCAAGTT CCAATAAAGT GCTAGAATGT G

SEQ ID NO:1969: (Length of Sequence = 266 Nucleotides)

CAATAATAAA AAGGATTATA TTCTGATAC ATGCAATATG GTGAACCGT AAAAATATCA TGCTGAGCAA GAGAAGCCAA  
ACACAAGAGA ACATGTTGTT ATGATTTTAC GTACATGAAA CTTTAGTAAA GACAAGTCTA ATCCATAGTG ACAGAAAGCA  
AATCAGTAAC TGCTGACAGG GGCAATGAG GNGATGATCT CAAGGGNACC TTCTGGGGTA AGACGCTGTT CTGTATCTCG  
ATCGNATTGG TGGTCACACA AGTGAA

SEQ ID NO:1970: (Length of Sequence = 317 Nucleotides)

CTCGGGAGGC TGAGGCAGAA GAATGGGTTG AGGCCAGGAG GCGGAGGTTG CAGTGAGCCA AGATTGCGCC ATTGTACTCC  
AGCCTGGGCC ACAAGATTGA AACTTCATCT CGGGGAAAA AAAAATGAGC TAAATACAAG AGATGGTAAT GCAGGAAATG  
AGAGAGAAAG AAGCTATAGA ATGCACCATC AGTCTTTGCT GAGAGGAGAA GCTAGGACAC TTATGCGCAT GTNCCTGTCT  
GCCTTCCTTC CCGTCCCGCG GATGGTTGGA GCAGGTCTTT GTTTGCTGCA GAGCATGCCA TGTCATCTC CTGTCT

SEQ ID NO:1971: (Length of Sequence = 263 Nucleotides)

GTGCATACTG CTGAGGCGGC TACGCTGGCA GGGTAAGCAA AAGAAGCACC CCAGCCTAAG TTTACAGAGA ACCAGGACAT  
CATTTTGAAT ATAACCTAGT TCTAATAGT AAATGGCCAC TCAAGGTGAC AAATAGGAAC TTCAGTGGTC ACCCTCGGA  
AGCAAGCTTT CAATGTCCC CACCTGTAGA AGGCTGAAAA ACATCCTCCA AAGATAACAG GTTCCAATCA CTGGAACCTG  
TATTACTTAT TACCATTAAA TAT

SEQ ID NO:1972: (Length of Sequence = 295 Nucleotides)

GACAAAGAAA GCAGAATAAT TTTACCTGAG AAGAAACCAG GAGGCTTCTT CTCTTCTTC TCTCTTTTT TTTTTTTTT  
TTTTTGACTA TACAGAAGAA AACTATCAGA GTTAGGTTAG AGAGTTGGGT TTGGGGTCAG GTTGTAGCAT GTGTATATT  
ATGGGTAAAT TTGTGTCTC CCCAAAATTA ATATGTTGAA GTCTTAATC CCTGTACCTC AGAATGTGAC CNCATGGGGA  
AATAAGGTCA TTGCAATATA ATTAGGTAAA ATAAGGTGAT ACTAGAAGAG GGTAG

SEQ ID NO:1973: (Length of Sequence = 243 Nucleotides)

AGACCGCAGT CATCTCAGC ACTACAGCA GGCCATNINC AAGCTGACCG CAATGCTCAT TAGCAGTAAA GATTGTNACC  
CGCAGTCTT TCATCATCTG TNCCTGGGTC CCCTCCGAT GTTCAATGAG CATGGCATGG AGACGGCCCT GGCCTGCTGG  
GAGTGGCTGC TGGCTGGCAA GGATGGAGTG GAAGTCCGT TNATGCGGGA GATGGCAGGG GCCTGGCACA TGACGGTGGN  
GCA

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SEQ ID NO:1974: (Length of Sequence = 304 Nucleotides)

GGATGAGATG ATCGACGTCA TCGGGGTGAC CAAGGGGCAA GGCTACAAAG GGGTCACCAG TCGTTGGCAC ACCAAGAAGC  
 TGCCCCGCAA GACCCACCGA GGCCTGCGCA AGGTGGCCTG TATTGGGGCA TGGCATCCTG CTCGTGTAGC CTTCTCTGTG  
 GCACGCGCTG GGCAGAAAGG CTACCATCAC CGCACTGAGA TCAACAAGAA GATTATAAG ATTGGCCAGG GCTACCTTAT  
 CAAGGACGGC AAGCTGATCA AGAACAATGC CTCCACTGAC TATGACCTAT CTGACAAGAG CATC

SEQ ID NO:1975: (Length of Sequence = 233 Nucleotides)

CCTTCTCCAT CACCCCTGGA CCTCTCTGA GTGGTCTCTC AAGGCACATT TATTTTCTCT GCTGCAACCT ACCAGATCTG  
 ACATCCACCT CCCCCAGCAC CCATGGGCA AGGAGGCCTG GGGCAGCCAA GGGGAGTTCC AGGACCAAGC AAGCAAGAAA  
 CCGTTCTTTG AACACATGGT TAAGCTTCIT CCAGCATGGC CCTAATTCCC CTACCTGCCT AAGCCAGGGG AGT

SEQ ID NO:1976: (Length of Sequence = 162 Nucleotides)

AAGTGTTACA AGCCCCAGAA TGCTGCCCGG CCTGCCCTGC TGGGGGAGCT GTCTGTGTGT CTGINTCTCT GGGGTTCCAC  
 CTCCAAGCCT ATACCAGCTG TGTACAGCGC CATCTCTCTG CCTTCTGTG CCCCTCACTC ACCAAACAG TGTATTATA  
 GC

SEQ ID NO:1977: (Length of Sequence = 270 Nucleotides)

GGCTGAATTA AGAGCATCCA GAAAGCCCAG GCCCTCCATA GGCTGTGGCG GGATGATCTT CACTTTGATC TCTTTGGTGG  
 CATTAGGTGT TGTGTGAGT GGCTGTGATT TCTTCTCTGC AGGGGGAGTG GCATCTCCTG GAGCAGCTAC GTTGCTCTGA  
 CGTTTGAGGG GGATGGGTTT AAGGTGTGAC TTGTAGAAA CCACCACTGT GCTGGCATTG TTCTTCACAG GCACCAAGGA  
 TGGTGTCTCC AGCTCTAGTC CAGTGGAAAG

SEQ ID NO:1978: (Length of Sequence = 167 Nucleotides)

TTGCAGGAGT TGCTGATATT TATTCAAAG TCATCCATAC AATAAAGAAC TCINCTTTTA AAATTCCATT TACATCAGCA  
 GTTAAAAAA AGTGACAGTG GATGAAACAT GANGCTGTAA AGTGCCTTTA TGGGGAATNC AGCCACGCCT GCCTCCACTG  
 TGCTGGG

SEQ ID NO:1979: (Length of Sequence = 346 Nucleotides)

CATCATAGCA ACAAAGGGCT ATGTACTATA CTCAGGAAAA CCATTIATTT GCACTGGAGG CAACTGTCTT TGAGAGAGGA  
 AAAGTAAATT GTCCAAGATG TAACATCTTA TAAATAGCAA AGCAAGGATG AAAATTATTA TATTINACTA AATCAGTATG  
 AGAATCCTGA TTCITCATT TATATCCCC AACACTCTAT CAGTTTGTG AACAAATCAA CAAATAAGCT TGAATAAAGG  
 NTCCACATCT CAATTCTCCT CCACCATTCT ATATTGCCCT TCATCCCTAC ATTAAAATGN TTATTCTGTC TTTTTCCTT  
 TAACAATTTA TCCTAAAGT AACTAG

SEQ ID NO:1980: (Length of Sequence = 174 Nucleotides)

CACAAACTGA CAGAGGAGAC AGGAGGAATT TAATATTACA TGCTATAATG ATATTATCT CACAGTTAT ATTTCAITCA  
 TTTATATTAT TTTTAAAAA GGTTCCTTA TCAGCTACTA AACATCTCAG CAATTGTTG TGATAGCTC TAGATTAAGC  
 AACAAAGAAT TGTA

SEQ ID NO:1981: (Length of Sequence = 276 Nucleotides)

TGNTCACTC ATAAGTTTTC AGTGGTTAAT TACTACAGTT TAAGAAGACG TGTGATTTAT TTTAGATCT GACCCAGCAG  
 ATCATACCTN TNCNTGAAT TACATGGTCT TCTTTTGGCT TCTAAGATGT CACACTCCTG TCTTAGTGGC CACTGCTCCT

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CAAGCCCCCT TTGCTAGCTC TTCCTCATCT GTCCAGCCCT AACCTGACCG TGCTATGTAA GTCTTCTCCG TTTTCACCCC  
CTNCCNGGGT GACCGTTATA CTNCCAAACC TACAGG

SEQ ID NO:1982: (Length of Sequence = 288 Nucleotides)

GCTGCAGAGA GGTGTGNTCC AGGAGCAGGC TTTCCCGCTC GGGATCCAGG TCATCCCCCA CCAGAGAAAT TTCACAGCCA  
TCCAGGTGTG GCACAATCTC ATCCGACATG CGTGTNTCTG TCACTGTGCC CTGCCAACTC TCATCCTTTT TGGCCTCCAC  
CTGGTGAGAA ATGGAGCAGG TGATTTGAAG ATCAGGGAAC AAAGGGACGC CGTTGGTTCC CTCAAAGTCC ACAGCTNGGC  
GGGCAAAATG AGCAGTGCCA CTCAGCAGGA TCTGGGGGGC GTCAGGCT

SEQ ID NO:1983: (Length of Sequence = 273 Nucleotides)

CACAAGCCAC TTTCAGCCTC CAGTGGGAAG GCTCCAGCCA CAGCCCGATA TTTGTCCTG CTTCCTCGTCA TCTCATATCT  
AAAAGTCATG GCTTAAGTTA GGCAATAAAA CCTGTGGCTT TAGGCATCTT TAGTAAAAAA GCTGAACAAA TCCCAAATTT  
ATTCCCATTT TCTTGAGAAA TAACTTCAT AAAACAACAG ACAGCTGTCA TGATTACTGA GTTTTGCTG ATGGCGAAAT  
AATTTTATG TAAGTATACT GAATAACAT ACA

SEQ ID NO:1984: (Length of Sequence = 221 Nucleotides)

GAAGAGSCTG CTCTGGCCTG GGACACCCCC ACTGCTCTCA AGGAGCTGGC ATCTCAGTGG CCTCTNAGCC CAGCCTGAGC  
CCTGTGGGAG TNCGGGGGCA GTGACTGGAA TGTNCTGCTG GGCAGGCTGC AGCAGCCGAG GTGGCCCCAG GGCAGAGGAG  
TGCAGCGCAN CTCATGGGTG CCCTATGCCA CCCCCTGGTC TCACTGGGCT GCTGATGCCG T

SEQ ID NO:1985: (Length of Sequence = 197 Nucleotides)

TTGCTACCAT GAGGGAAGTG CTCGTTCCTT GGCTACAGC AAGTATACA GCCTGCGAGG CACAGTCCCC AAAAGTCTAG  
CTGCAATTCT ATTGGTGGTT TTCCCCAAC AGCAATAACA AGATGTTACC TGAAGCACA CCAGAGCCAA TCATGACTCA  
GGCTGTCTA GATGTTTGA TGTCTGGAAA TATATTT

SEQ ID NO:1986: (Length of Sequence = 268 Nucleotides)

CATTGGACA TTCCTCTTAA TTGTTACAT TCCAACCCAG CACAGTCACA TGCACACAG GAGATCAGAA ACCTTTNGGC  
CACAGCCCCA GGAGCCCGC GGGGGGAGG GCGGGACCGA CAGGGGCGGG GCGGGGCGGT GGAAGACTCC TCCTACCGAG  
CCTCCAGGC GNTCGGCGTT TGCATAAACA AGAGAGCTGG AGAGNTGCC CTCACAGTG CGCTGGGGAA AGGGGAGGGA  
ACGTGACAGG CAGGTNNGG ATAGGGAC

SEQ ID NO:1987: (Length of Sequence = 282 Nucleotides)

GTCTCACTG TAAACAAATG AGGATGGAGG AACTGAGAG GNTCAAATAT GAAAGGCAGT ATGGGGAGTT AGAGCCACTC  
GTCTACTCCT GTAAAGAGCA TGACTIONA CAGTCTTTCT AGCGGGTAGT CACTCTTTCA TTAAACAAAT ACTTAGTCCC  
TGCAATGATC TAGGATAATA ACTCAACAGT GTATATCAAG AGCCTTTAAA AAGTTATACC TGGCCGGGCG CAGTGGCTCA  
TGTATGTAAC CCTAGCACTT TGGGAGGCCA AGGCAGGCAG AT

SEQ ID NO:1988: (Length of Sequence = 226 Nucleotides)

GTGAGGGGGT TCGTCTCTC AGGAAGTTAG GCCATAATTT CTGCAAGTTC AGTGATTAAC TTGGATCCAT CCCATGCTGT  
CTTGAAGTGT TCAGGAATGG GAAATCTCT ATAATCACCA TCTGAGGGA TAAGTATGTT CATTTAGAT GACTTGGCGC  
TCACGNTCTC ACAGTCTAAT GCATCTTCAC TGAGGTATAT GTGGCAACCT TCTGTCTTAT TAATGG



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SEQ ID NO:1989: (Length of Sequence = 193 Nucleotides)

CTCCCTGTAG GTCATGTCCT TGAGAGTTAA AAGATGGGTT GAGTAGGCAG AGGTCTCAGG CACCGGGGAC AGAAGACAAG  
 GACATTCAGC ACGGGCAGCC ATGCTCTTCC CAGCACCCAG AAAAGGCCCA GGGCCCGGAC TCCTGGGTGT GGTTCATGAGA  
 AGCGCCTCCG ATTCAGCCTC TTCTCTTCTT GTG

SEQ ID NO:1990: (Length of Sequence = 223 Nucleotides)

CTGCTTCATT TACCACCACC AGCCGATGGA CCAGTTTATT GGATTCACCT ATGATACCAG GACTTTTCCA TTCAATTCAA  
 TTCAACAAAC TTTTAGAGAT CGCCCTATT CCAAGCTCAT CCAGTTCTG CTTTCATGAAG GCAGGCTTTG GCATATCAGA  
 CATAAAAGC TGGAGGAACT TGAGGATTCT TTTGTGGSTA AGTATATAAA GTGCATTCCC ACT

SEQ ID NO:1991: (Length of Sequence = 385 Nucleotides)

GCAGAGAAAG TGCCAGGCAT CAACCCAGT TTCGTGTTCC TGCAGCTCTA CCATTCCCCC TTCITTGGCG ACGAGTCAAA  
 CAAGCCAATC CTGCTGCCCA ATGAGTCACA GTCCTTTGAG CGGTGGGTGC AGCTCCTCGA CCAGATCCCA TCATACGACA  
 CCCACAAGAT CGCGTCTCTG TATGTTGGAG AAGGCCAGAG CAACAGCGAG CTCGCCATCC TGTCCAATGA GCATGGCTCC  
 TACAGGTACA CGGAGTTCCT GACGGGCCTG GCGCGCTCA TCGAGCTGAA GGACTNCCAG CCGGACAAGG TGTACCTGGG  
 AGGCCTTGAC GTNTGTINGT AGGACGGCCA GTTCAACTAC TNCINGCAGG ATGACATCAT GGAAG

SEQ ID NO:1992: (Length of Sequence = 312 Nucleotides)

GGCTTACAGG ACAGAAAGGT CCCTTCTCAC AGTTTGGGAG GTCCGAAGTC TGAAGTGAAG CTGTCAGCAG GGCCACACCC  
 CCTCTGGATG CTCCAGGGGA GGGTCTTTTG CCTCTTCCAG TTCTGGTGGC TCCAGGCAIT CCTTGCTTTA TGGTGGCATC  
 ATTCATCTCT GCTCCGTCTT CACGTGGCCT TCTCTGTGTT GTCAAATCTC CTTCTCTGTT CTCTTGTAAG AACACTCGTC  
 ATTGGGATTT AGGNGCCACC CCAATCTAGA TGGTCTCATC TTGAGCCTTT ACTTTAGTTA CCTCTGCAAA GA

SEQ ID NO:1993: (Length of Sequence = 429 Nucleotides)

CTGTTTTTAC TCGACGAGGA GAAGACCTTT TCATGTGTAT GGACATACAG CTCGTTGAAG CACTGTGTGG CTTCCAGAAG  
 CCAATATCTA CTCCTGACAA CCGAACCATC GTCATCACCT CTCATCCAGG TCAGATTGTC AAGCATGGAG ATATCAAGTG  
 TGTACTAAAT GAAGGCATGC CAATTATCG TAGACCATAT GAAAAGGGTC GCCTAATCAT CGAATTTAAG GTAAACTTTC  
 CTGAGAAATGG CTTTCTCTCT CCTGATAAAC TGTCTTTNCT GGAAAAACTC CTACCCGAGA GGAAGGAAGG GAAGAGACTN  
 ATGAGATGGA CCAAGTAGAA CTGGTGGGAC TTTNGATCCC AATCAGGAAA GACGGCGNCA CTNCAATGGG GGAAGCATAT  
 GAGGGATGAT GGACCATCAT CCCAGAGGT

SEQ ID NO:1994: (Length of Sequence = 377 Nucleotides)

TGGGGTGGCC AAACCAAGTG CCCCTGTCCT GTGTCAGCCA GCTGTGGCAA TTTCACCCCT ATTCCCTTGA GAGGCCAGCT  
 GCCTGTCTGA AGGAGTCAGA AGTCGGTGA TGTATTGAG GCCTTGGAGG CCCAGTNTG GCGGGAGAGA AATCCACACC  
 TGTGCTTGA GTTCTCCTTC CCTGACCCTC TGAACCGCG CTTAAAATGC TGTCCCGCCT GGAACAGGGA GGCCACATCC  
 AGCAGTGGCT CCTCAATGTG CTGCCCCAGC CTGTGGGAAT CCGTTTTTGT GCTTGATTTT TTGCTGGAGA TGTGGAAGGT  
 GATCATGCCA TCCCCATGA AGATATAAGA AACANCATAA CCATGGTCAT CAGCAGG

SEQ ID NO:1995: (Length of Sequence = 341 Nucleotides)

GGACCTATAT GGCCATGCTC TGGCTCTACC CTGTGGGAAGC CTGATCCCGG TGTGTGGCCC AGCTTGTGTC GGCCCTGGGA  
 TGCTGCATCT CCAGGCAACT ATGCACCTTC CCGGGGAGAG AACCAGTATG AGAAGTGGGG GCAGGGCACA CATTCACTTT  
 TGTACCTGCC TCTTTGGTTT GGACCTGGCC AGTCGGGTCA CTGCCTCCAC GTCTGAGGCC CCGCCAGCTG GCCGTCTGTC

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CTGCCAGCC TCAGGCTGCT GCGCTCTCTC GGCTTTTACG GACCTCTGAG GCGAAACCC CACCTOGAAG TTTCCTCCGTG  
ACAGTGCCTC CGAGTCCACA T

SEQ ID NO:1996: (Length of Sequence = 316 Nucleotides)

GCAATATGGTT GGTGAACAGT TTTGCAGCCC TAGGCTCCTG TACTGTGCGT GCACCGCCGC CCGGSCAGCC GCTGGCTCCA  
GCTCAGGAAA CAGCCCGGG CGCCGCGCG CTCTGAGTCC AGCCTCCTAC TGAGAACAGT CCTCCCTTG TGCGGGTCGC  
ACG3CTAGCC GCAGGTTCCG CCACGTCAA TCCATTTTNT AAAAAAGCAG GGAGCAGAGC TCTCTCTTCG CCGCCGACGC  
AGAAAGGAGC TNGGGAGGAA AAAGCTGCTG CCTTTTGC GC TGGAGATTCTG TGGCAAGGC TTCTCATTTT CCCAGG

SEQ ID NO:1997: (Length of Sequence = 320 Nucleotides)

GCAGTTTAT GTTTTATTT ATGTATTTA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTAC AATATACTTG  
CAGAACTGTG CCTGGNGCAT CATGGGAGCA GAGAACTTGT CCAGTGAATA GTTGTGAAG AAAGNGTAA AATCTCCCC  
AAACCCTAAA GGCATCCTTT TCGTAGTGTG TGTCCCATAG GTATGCTGC TGAGCACCAG GGCTGCTCAG CATGCTCCCA  
AGAAGCAGAG TCAGGGAGGC AGACAGCAGG GTTTATTAAG GTGCACANCC ATGTCTGAGC CCCAGCTCTC TCCGNTTCT

SEQ ID NO:1998: (Length of Sequence = 395 Nucleotides)

TTTGATGCTA TGGCGCTGSA CCCAGGGCCC TCCAGGCCA TCTCTGTCC TCTGGGGTGG TCCAGTTCTA GAGTGGGAGA  
AAGGGAGTCA GCGCATTTGG GAATCGTGGT TCCAGTCTGG TTGCAGAATC TGCACATTG CCAAGAAAT TTCCCTGTTT  
GGAAAGTTTG CCCCAGCTTT CCGGGCACA CCACCTTTTG TCCCAAGTGT CTGCCGGTCC ACCAATCTGC CTGCCACACA  
TTGACCAAGC CAGACCCGGT TACCCAGCT CGAGGATCCC AGGTTGAAGA GTGGCCCTT GAGGCCCTGG AAAGACCAAT  
CACTGGACTT CTCCCTTGA GAGTCAGAGG TCANCCGTGA TTCTGCCTGC AACTTATCAT TGATCTGCAG TGATT

SEQ ID NO:1999: (Length of Sequence = 337 Nucleotides)

GAAAGTATTT GTGTGATTGA GTCACAGCT GAATCAATCT TCATATAATG CCATTTTTGC TTAAAAGAAT GCCAGACTTG  
GGCATTAGGC TGACATTTTC TTGAAAACAG TGAGGCTTTG CTTTAGGGAA AATAGTGGTA GTATTTATGG TCGATGATAA  
AGTTCCTAGA TTTTAAGCAA AAATTTTGA AAGCTTGAT CAGCTGCTGT AAGTATATAA TGAAATCTGT CATTATTTGA  
TTATCTGCAT AACTGAGTCA GTATTTCCAA ATGATCAATG CATAGTATTA TAAAATCAT ACATGGGTAA GAAATCTTGA  
CAAAGTGTCA GCTAGAC

SEQ ID NO:2000: (Length of Sequence = 329 Nucleotides)

ATGTAGCCCC CTGCTGCAA GGTGCCATCT TTTTCTGCT GCTCACACAG CAGCGTGCTC AGGGCCTGCC TGCATGGCAG  
NNTCATCATG GGAAGCCCA CAGCCACTGA CATCATGAAG CCCACACGGA GCATCTCCGT CACCAGGTTG GAGGGAAAGT  
GCATAGCAC GTTTGCCGGC CGTGGCTTCG GTGAAGCTGA CGTAGCCGAA AAACCCACC ATGACGTAGG AAGGTGGTGA  
CCACATTAAG GGAGGAAGCA AATATGGAGC TCATGGTTTT CACTTGACGG GTCATCCAG GCTGTCTAG GTGGGCAGCA  
CCTGGGACT

SEQ ID NO:2001: (Length of Sequence = 308 Nucleotides)

AAGTCTGGGG TTTGGTAGGC TCCAGGATT TCCCTCAGCA GGCATTGTG CTGCCGAGG GCCGTCTGGG TGCCCGCAG  
GTCTCTCTG ATGCTCTGTA GCTGCGGTG GAACGACTCC CTCCTGACT GTGTGGCAA GCTGAGCTCT GCCCTGACC  
ATGTGGCATT GGCCAGGATG GGGGCCANGC CCGTGGGAT GCTTTGCTGC CCGTCTCTG AGGCACCGAC TGCTCTCTCT  
CCCATGTCC CCAAGTGCTT CCTCAGAGAC TCAACCTGGN TCCAGAACTC ACCATCCACT AGGACCTT

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SEQ ID NO:2002: (Length of Sequence = 242 Nucleotides)

AGCCAGGCCC TGGGCCCAAG CCCCTGTGCC CTCTCCACT GCCCTCTTT CCAGACAGTA AAGGCCATGS TCAGTGTGTT  
 TTTCTCTGT AAACAAACCC CAGCTGTGTT AACAGAAATG CTAATAACCT ACTGGGAAAG ATGGAGGTCT AAATTACCTC  
 CAGGGTTTTT CTGGGGGTTT ATCACCAGTG TGGGTCCCTT CTGATACCAC CAGGTTCACT CCAGGCAGAG TGGGGCGGAA  
 GG

SEQ ID NO:2003: (Length of Sequence = 328 Nucleotides)

ATATTCTCAC TTATAAGTGG GAGCTAAATN ATGGGAACAC ATGGACGCAT AGAAGGGNAC ACTTTTACAC TNCCTGGTGGG  
 NGTGTAAGT AATACAACCA CTGTGGAAAA CAGTGTGGCG NTTCGTTAAA GAACTAAAAG TAGATCTCCC GNTTGATCCA  
 GCAATCCAC TACTGGGTAT CTACCCNNA GAAAATAAGT CATTATACAA AAAAGATACT TGCACACACG TTTATAGCAG  
 CACAATTTGC AATTGCAAAA AATATGGGGC CAACCCAAAT GCCCATCAAT CAATGAGTGG ATAAAGGAAA TGTGAGATAT  
 ATATATAT

SEQ ID NO:2004: (Length of Sequence = 211 Nucleotides)

AGCCTTTTAA TTATGINTT TTTTTTTTT TAANCGAAGG TCCCTTACTG GTCCCTGCTC CATGAGTAGC CGTGACCAGG  
 GGAAAAGGGA GAGGAACCAG CCGGCACAGG GAGGGGTCAT CTCCACAACA TTCCATTTAT ACACAGAACT AAACAGACAA  
 GCACAGNGTC ACTATTGCGG TTAGAAGTTG GCAGCATGGG AAGGGGGAGG A

SEQ ID NO:2005: (Length of Sequence = 241 Nucleotides)

CCGGGACACC GTGGGAAGG GGTGCAGGTG GGTGATGGC CAGAGGAATG ATGGGCTTTT NTTCTGAGGG GTGTCCGAGA  
 GGCTGGTGTG TGCACCTCTC ACGGACCCCA TGTTGGATCT TTCTCCCTTT CTCTCTCCT TTTTCTCTC ACATCTCCCC  
 CATAGCACC TGCCCTCATG GGACCTGCCC TCCTCAGCC GTCAGCCATC AGCCATGGCC CTCCCACTGC CTCTAGCCC  
 C

SEQ ID NO:2006: (Length of Sequence = 266 Nucleotides)

TTCCCCCTAA CCTGTGAGT GGGCCTTTA AGTAGTAAGT AGTATACACC TAGATATGGA TAGATAGCTA GGTGACCAAA  
 CCTAATGGAT TAAGGCCATC CTCGCTAGG TCACTTACTA AAGATCAGGT CATATGTCAT ATCGTTCCIG TGCTTTTITAG  
 AACGTATTG GGAATGGGTT CCAGATTTTT TTAAACACA TATTAAAGAT TATTATATT ATGCTTTGTT TCGAAAGGT  
 TTTAAGGTGG ATTAAATAT AAGATT

SEQ ID NO:2007: (Length of Sequence = 419 Nucleotides)

AGAAAGAGGC TTCCTCTGCG GGAGGCAGGT GGAGCACAGG GAGGGCTCCT GGGAGGCACA GGAGTGGGGT GGGGGCCAGG  
 AAGGGGGAGG TGGACAGAGC GACTTGGATA AGGCTGGGCC GGGCCACGC CCACCTCAAG AGGGGGGCG CCTCCTCAGG  
 AGGNATCAAG GTGCAATCCA GTCTTCCTTT CTCTCCCTGA AGACCTGAGT TCCAGCCTTC ACAGAGCGTC ATGCGCATTC  
 TTCTTTCTGG ATGCTAACCC CAAATCCGAC ACTCAATGGT GCACCTCAGG TACCTGCCAA GGNCTINTGG GCCACATGG  
 AAGGTGCAGG GTCTGGGTCC CTGGATGACG AGGTGAGGGG CAGATGGGTG ACCAGGGAAG GGCATGACCC AGAGCTNCCG  
 GGACTCATGG AGGATINGG

SEQ ID NO:2008: (Length of Sequence = 360 Nucleotides)

CTTTCTGGA GAAATAATA CGCTCGTCC TCTAATTAGC CCATCGGTTT CAGGTTCACT ACTCTGCTAT CTCTCCTGG  
 AGTTTACACA AGCCCTTCAG AGTGTAACA CCGATGTGGA TTCAATCCCA CTCATTATTT TTTTCAATAA AAAGAGAACT  
 GTTTCACAG ACAGGTGTG TTTCCGACAT CATCAGAGAG GAAGGTGGAT GGTCTATAC GGTAAAGCAIT CTACCCCTCA

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GCTGCCAGG ACAGATCCAT AAAANTCCAA AAAGGGAAGA GAGAAACAGC TTGAGTACAG CTGAATCATT CACAACAATA  
TTACAAGCAA TTACTTCAAT GGTAAAGTCT CCACTCTAGA

SEQ ID NO:2009: (Length of Sequence = 411 Nucleotides)

ATTACGGGCA CCGCCACCA CGCTGGCTA GTTTTGTAT TTTTAGTAGA GACGATGTT CACCATGTTG ACCAGGCTGG  
TCTCGAATC TTGACCTCAA GTGATCCACT CGCTTCGGCC TCCCAAAGTG CTGGGATTAT AGGCGTGAGC ACCTGTGCCC  
AGCCTCACAG CTGCATCTTA ACCTTACCTT TGCCCTCGCC TCTCAAGCTG GTACCTCCTA ATTTACATCC TAAGAGTGGA  
ACCATGTGAC AAGGACTGGA GTGCCATTGG CTGTGSACTG TTCAGGCAGG GAAGTACAAG ACCACTCTTG TATTCAGGGG  
CAACCAAAGG AGAGAATTAC GTACTTGTTG AGTACAACT GCACCAAGCC CTGGAGACCC ATTACCACCG TTAACCTCA  
ATACAGCTCT G

SEQ ID NO:2010: (Length of Sequence = 311 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGG AAGCTGTGTG CACGCGGTG GAGGGTNCCT NTGGAGCTGA CCGGGCCCTT  
ACCTTCTCCT GCTTGTGAGA GGTGAGTCCT GGTACCCAGC ACGGTGGCCT CCGGGAGGCT TTGATAGGTC AGCCTTTGCT  
GCCTCCAGC TCAGGGCTCC TCCAAGGAAC CTGCGGGGCC CCATGTGCCC ACAGCCGAG GAGGGAAGCA CCGACCGCCC  
TCCTCGTGGC CAGTTGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTCCTCG TGATACAACG T

SEQ ID NO:2011: (Length of Sequence = 192 Nucleotides)

TCAGGACATT TCAGTGAGGC CACCTACAAG CAGAAAGGAG GCCAGGGCT AGGGACAGAN TGGCCCCAGA GCCAGTCAGC  
TGCAGCAATT CTGTGTAGAA AGGGAGGSCA AGCTGCCAGA GCANTGTNGC CCAATATGAT GCCTACCGA GACAGATGTC  
CCAGTAGAG TGTTTCACT GACCTTCTAA AC

SEQ ID NO:2012: (Length of Sequence = 367 Nucleotides)

GGATGACCTT CGAGGACGTG TGCCGCTACT TCACGGACAT CATCAAGTGC CGCGTGATCA ACACATCCCA CCGAGCATC  
CACAAGACGT GGGAGGAGGC CCGGCTGCAT GGCGCTGGA CGCTGCATGA GGACCCGCGA CAGAACCAGG GTGGCGGCTG  
CATCAACCAC AAGGACACCT TCTTCCAGAA CCCACAGTAC ATCTTCGAAG TCAAGAAGCC AGAAGATGAA GTCCTGATCT  
GCATCCAGCA GCGGCCAAAG CGGTCTACGC GCGGGAGGG CAAGGGTGAG AACCTGGNCA TTGGCTTTGA CATCTACAAG  
GTGGAGGAGA ACCGCCAGTA CCGCATGCAC AGCCTTCAGC ACAAGGC

SEQ ID NO:2013: (Length of Sequence = 213 Nucleotides)

GATTTTATGG AAAAAAATTT CCATTTTNT TAAGAAATAA GGAGTTTNTG TGTCGAGGGC ATGACTACGA GAGGCTGGAA  
GCTTCCAACA GAGAATGCTG AACGANTTCC CCCATGCCAT CGCCATGCAG CACGCAACC AGCCCGATGA GACCATCTTC  
CAGGCAGAAG CTCAGTATTT GCAGATATAT GCTGTGACTC CCATTCCAGA GAG

SEQ ID NO:2014: (Length of Sequence = 333 Nucleotides)

GTAAATAAA ACAGCAAATT CTAAATACA TTATGAGTAA AGAAAGATTA AAATAAGGNA ACAGTACTTA CTGTGCAACT  
TTAAATTATA CCAAGTAAAG TACACCACCT ATCACTGAT AACATTTTCC CTACGTTGAA AACACAAAAC CTACTTATCG  
ATATTTTGA TATTAAAAA AAGGACATTC ACTATTGTAG CCCTGACAAC TCTTCCAGTA TTTTAAACCA TTCAGATGTA  
TTATGTGGGN ATATTTAITA ACATAATTIN GTTAAACACA TTTCTTCTA CACAACTGA ATTTTAAAG TGTCTATAAC  
ATTTTCAATT ACA

SEQ ID NO:2015: (Length of Sequence = 179 Nucleotides)

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NCACCACTTA TTGTCTTCAA ACATTATTGC ACTTTAACTT TCTTAATTG ACAAAGCATT CAAGAAACAT CTGCAGACTA  
GTTTTAACAG ACAAATAACA CCTGTAAGCA GACATGACTG TCCTAAATTG TTTATTAAGA AAGTTAAAGN GCAATAATGT  
TTGAAGACAA TAAGTGGTG

SEQ ID NO:2016: (Length of Sequence = 293 Nucleotides)

TTTTCCCTCC CCAGAGATGC TTTATTACAT GGTTCATCA GTCATCAATG ATGGGTCCCT ATGCCCATGC GAGGAGACAG  
GAACATCTGT GTGGTACATG GCACTGTTCC CCTCTCAGCT ACGCAGTCAG ATGGGGGCAG GGGGATGAAT GGGTGCTTGG  
CTTCCCTGCT GTTGGGCAGG CTCTGAGATC TCAGCAGACA GAAATGAAAG CCTGGCAAAT AGGGAGGCAG GAATGTTCAA  
GCATCGGTGA CCTCCATGTT CTGCAGCCTG TTTTCTAGGG TGACGTCTCT TTG

SEQ ID NO:2017: (Length of Sequence = 504 Nucleotides)

CGCGTGCTGG CCGCGCTGTG GCGCGCTGC TGTGCGNCCC CAGNCTCCTC GTCGCCCTGG ATATCTGTTC CAAAAACCCC  
TGCCACAACG GTGGTTTATG CGAGGAGATT TCCCAAGAAG TGCGAGGAGA TGTCTTCCCC TCGTACACCT GCACTGCGCT  
TAAGGGCTAC GCGGGCAACC ACTGTGAGAC GAAATGTGTC GAGCCACTGG GCATGGAGAA TGGGAACATT GCCAACTCAC  
AGATCGCCGC CTCATCTGTG CGTGTGACCT TCTTNGNNTT GCAGCATTGG GTCCCGGAGC TGGCCCGCCT GAACCGGCA  
GGCATGGTCA ATGCTGGACA ACCAGCATCA ATGACGATAA CCCCCTGGTT CAGGTGAAAT TNCNCGGAG GGATNTGGGT  
AACANNITTT GTTACGAAGG GTGCCANCCG TTTGGCCAGT ATTGGTACCT AAAGGCTTTA AAGGTGGCCT ANAGCTTAAT  
TGGNAGGAIN CGNTTNTTCC ATGT

SEQ ID NO:2018: (Length of Sequence = 354 Nucleotides)

AGANCAGACC CACAGGCATG CAGAAAGGTA GGGCAGTATG TTTAANTCCA GACTTGGCAC ATGGCTAGGG ATACTGCTCA  
CTAGCTGTGG AGGTCTCAG GAGTGGAGAG AATGAGTAGG AGGGCAGAAG CTTCATTITT TTTCTTCTCT AAGACCTGT  
TATTTGINTT ATTTCTGCC TTTCCGAGTC CTGCAGTGGG CTGCCCTGTA CCTGAACCT CATGAGCCTC TAAGGGAAAG  
GAGGAACAAT TAGGACGTGG CAATGAGACC TGGCAGGGCA GAGTACAAGC CCAGCACCCA GTGTCCAGN CTTACTGGGT  
CCTTANCTTG GGCCAAACAG GGAGGGCTGA TACC

SEQ ID NO:2019: (Length of Sequence = 295 Nucleotides)

GACACAACCT TTGAACTAT TGCTGCTGTT TTCATTTTAA AAAGGAACCT TTAATACTAA AATTATAGGA AGAACATAAT  
ATCTGACGTC ACGTAAATTC AGATTGAAG GAAATTTACT TTTTNCCTT ATTGINCTT ATTTTCTCTC ATTTTGTTAA  
GAACCAGCGA ACACTTTGAA GAAAGCCAAA AGTTTACATC TGGAGCTGGA GGGTCTGTG ACTGCACACC AGGCACTCTG  
CCAGCCCTAC TTTCTGCTGT AGTCTTCAG GTACATGACC AGAGGTGGTA CTTC

SEQ ID NO:2020: (Length of Sequence = 217 Nucleotides)

ATTGGAACTT AAGTTTACA AGGAAAGTGG TCACTTTAGT TCACCACTTT CCTGTGAAA CTTAAGTTCC AATGGGAGAA  
TGACAGTAAA CAGACAATA TTATAATANG TCCATGGAAG ATTTTGGTGT ATGTNAGATT TNCAAATCTG TAGAGAAACN  
TNGGCTCATT CAATAAAAT TTTGAAACCA TTGATTAATG TCTTAATAAC TATATGT

SEQ ID NO:2021: (Length of Sequence = 380 Nucleotides)

TTTTTTCTTA AAACAACAGC AACGTGATCT TGGCTGTCTG TCATGTGTTG AAGTCCATGG TTGGGTCTTG TGAAGTCTGA  
GGTTTAACAG TTGTGTGTC TGENGGGATT TTCTACAGC GAAGACTTGA GTTCTTCAA GTCCAGAAC CCCAAGAAATG  
GGCAAGAAGG ATCAGGTCAG CCACTCCCTG GAGACACAGC CTCTGGCTG GGGACTGACT TGGCCATGTT CTCAGCTGAG

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CCACGCGGCT NGTAGTGCAG CCTTCTGTGA CCCCCTINTG GTAAGTCCAG CCTTCCAGG GCTGCTGAGG GCTGCCTCTT  
GACAGTGCAG TCTTATCGAG ACCCAACGGC TCAATCTGCT CATCCNTAAA GTGGGGGATA

SEQ ID NO:2022: (Length of Sequence = 223 Nucleotides)

GGTCACACAG CTAGTTGGTA GAGGAGCTCT TCCATAAGAT AGCAAGGCCA CATCACCTGC AGGECAGTGC CTGCNCTGGG  
AGGTGGCACA ATGTGCCAAG TGATGACGAT GACAATACT ATGAAAGGAT TTTATATTG CACAGCATTT GGTTCCTGA  
TCTTCGATGA GGAAGAGCTC CTGCCGATGT CTGCTGAATT GTGCAGTAAA ATATTCAGGA TGG

SEQ ID NO:2023: (Length of Sequence = 294 Nucleotides)

TATTCTTAAG TTTGCACTTT ACAAACCCAC AAGGGAGAAG TCCTTGAAGG GGAGACAGGG GTAGGGGATT AGGGAGTGGG  
GGATGGTAAA GAGGGGAAGA GGAAGACCCA GAAACGAAGT CCCCTCCAAC CCCATCTCGG GGACCAAGCA GAGACTAGGC  
CTCAGGCTAG CCCAGCAGGG TTCTGTGTG CTGTTGTAC AGAGCTAGGC CAAAAGACCT CAGGGGAAGG GCCATGGCCC  
TCTAGAGACT GCCGCCATTT GAGGGACAGC CACAGGCCAA TGTTTCCTGT GCCC

SEQ ID NO:2024: (Length of Sequence = 234 Nucleotides)

ATTTTGTGCG GGTTCGAAAC GTCTTCCTGC CTTGAGCTGG GAGCTTCACC AGGCTTCGGT GTAGCGGACG TCCACTTCCT  
TCAAATTGGG AAGCTTGGCC TTCAGATCTT CGTAGGTGTC AGCTGAGAGC TTNGTGCTGT TCATGTTTAA ACTGCAGAGA  
CTCTTCATGG AGCTCAGGGC CAGCAGGCCA GCGTCTGTAA CCGGGGTCTC GCACAGGTTT AGCACCTGGA GCAT

SEQ ID NO:2025: (Length of Sequence = 327 Nucleotides)

AGGAACAAAT GTTAAAGGGT AAGATAATTT CCTGCAAAA GGACACAGAA GGCAGTCTTA AGAAGATGAA TGGATGAGAG  
AAGGGAGAGA ATAAATGCA ATAACGAGCC AGCATTACT ATGTATTNN TCCTCACCTG TCTCTCCATA TTTAGGTGAC  
TTACCAGTTT CTGTGCCCTT TTGGAGCTTT INTTGAGGGC TTCATTCTCA CCTGTATTT CTTAGCCCT AAATTGACAC  
TCTCTCAAA AATCCATTCC ATTGTCTGTG GACCNAGATG TTCTATGTAA TTCAGAAGCA GAACTCTTGG CTAAGGGCT  
AGTGTTG

SEQ ID NO:2026: (Length of Sequence = 328 Nucleotides)

TCAGTATAAA TTTAAAGAA ACAGCTTAAT GAAATACAAG TCAGTTTATT TGATATTCAG CCTACAGCTT TCCAAAGCAG  
CAGTGAACA TGTGTGTGAG TTTATACCAT TCATTCATTC ATTTATTTT NCTTCTTTC TTTCAGAAA TACTGGGTGT  
TTGATATTTG TTTCACTGTG CTAGTTCTG GGAATGTGTA AGGAAGAGGC TGGCTGTGTG GATGAGAGCA ACTTGCTTTT  
TACAATAATT ATTTGTTATT GTAAATTAAC AATTGCTCT TCTGGTATTA TATGGAAGTA TTTGATCCNG TTGATGCCAC  
TGCCTTTG

SEQ ID NO:2027: (Length of Sequence = 307 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGGG AAGCTGTGTG CACGCGCGTG GAGGGTNCN TTGGAGCTGA CCGGGCCCTT  
ACCTTCTCCT GCTTGTGAGA GGTGAGTCCT GGTACCCAGC ACGGTGGCT COGGGAGGCT TTGATAGGTC AGCCTTTGCT  
GCCTCCAGC TCAGGGCTCC TCCAAGGAAC CTGCGGGGCC CCATGTGCC ACAGCCCGAG GAGGGAAGCA CCGACCGNC  
TCCTCGTGGC CAGTTGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTTCTC GTGATAC

SEQ ID NO:2028: (Length of Sequence = 272 Nucleotides)

ATCCATTTCT GCATTAACT AGAGTTAAAA AGGAATATTG TTTATTGTTT GGCTCTCCCC ACTAGAAGTT TCACAGNGC  
ACAGATCATA TCTACCATT GAACAGCTCT CTGCCTGATG GCTAATACAT TTNTGGCAT ATAGTAGGTA GGTGCTCAAT

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AAATTTNTTA CAGGAATAAA TGAGATAGGA TTTTCAAGGG TATTINCIAT TAGGATTAA TAAAACAAAG TGATCTTTAG  
AGAAACAAAT CTCCCCATCA ACATGCTATA CT

SEQ ID NO:2029: (Length of Sequence = 261 Nucleotides)

ATTTCTACTA AAANTACAAA AAATTAGCCA GCGTGGTGG TTGTGCACCT ATAATCCCA CTACTCGGGA GGCTGAAGCA  
GGACAATTGC TTGAACCCAG GAGGTGGAGG CTGCAGTGGG CTGAGATCGC ACCATTGCAC TCCACCTTGG GCAACAAGAG  
GGAAACTCCG TCTCAAAAA ACAAAACAAA ACAAAACAAA AACAAAAGTC AAGTGCTTAC ATTTTGCCAG AAGCCACAAA  
TGAAGACTGT GCCTTATAGG C

SEQ ID NO:2030: (Length of Sequence = 384 Nucleotides)

NNCCNNGGAC CAACAGCAGC CAGAGCAGTT AGCCAGTTAG TCCCCAGGCC TGTGGCACAG GCGTTTCTGA CCGCTGGGGC  
CGAGAATGGG TAAGTTGTCT GGAGTCAGGT GGGCCCCAGT AGGACAGGGT CACAAAGCCT GGGTTTGTCT CTGGGTACTT  
TGCGCCTCTG GGGTGCTAGA GGTGGGGCAT GGTGGCTGGA AGTAAACTG CCAACTCTGG CCTCAGAAC TCTCAGGTAT  
AGAAGCCCAA GATGTCTAAT ACCCTINTCC AGTGCCCGAG AGCTGCCCTG TGTGAGGTAG AGAGGACACT GTACCTGGGT  
GAATGATCAG ACCCTGGTAG CTAAGAAGN ACTTGTCCCT TTAGTCAGTT TGCAGANCCC CTTT

SEQ ID NO:2031: (Length of Sequence = 261 Nucleotides)

ATCAGAGAGG AGAAGCCACT GTTGCCAGGA CAGACGCTG AGGCGGCCAA GGAGGCTGAG TTAGCTGCCC GANTCCTCCT  
GGACCAGGGA CAGACTCACT CTGTGGAGAC ACCATACGGC TCTNTCACTT TCACTGTCTA TGGCACCCCC AAACCCAAAC  
GCCAGCGAT CCTTACCTAC CACGATGTGG GACTCAACTA TAAATCTTGC TTCCAGCCAC TGTTCAGTT CGAGGACATG  
CAGGAAATCA TTCAGAACTT T

SEQ ID NO:2032: (Length of Sequence = 344 Nucleotides)

CCCCTGACG GCGTCTGGTT CTTGGGGAA AACGCTCACC CACCCCTGGT AAAGGGCCTG CAGATCGAGC ATCCCGGGCC  
CCACCTCGAC CACGAGCAC CACAAGCCAG GTCACCCAG CAGAGGAAAA GGATGGACAC AGCCCCATGT CCAAGGCCCT  
AGTCAATGGA CTCAGGCAG GACCAATGGC CTTGAGTTCC AAGGGCAGCT CTGGTGCCCC TGTATATGTG GNTCTCGCCT  
ACATCCCGAA TCATTGCAGT GGCAAGACTG CTGACCTTGA CTTCTCCGT CGAGTGCGTG CATCCTACTA TGTGGTCAGT  
GGGAATGACC CTGCCAATGG CGAG

SEQ ID NO:2033: (Length of Sequence = 373 Nucleotides)

GGAAGAAAGA AAGAAAGAAA GAAAGAAAGA AAGAAAATGG CCCCATAGTG CTTAAGTCCT CAGACATGTG TCCTGGTGCT  
GGGGACAGGG CTTCTGACAT TCTCTCAGGT CAGTATTTGC AGGTATCCA CCTTCGACTT CAACACATGT GACCAGAAAC  
CTTCCAAGG CAGCCATCCA CTTTGCTGTC CCTCCGACGG CCATGGCTGA CCACTGCTGC TGCTGTGTAT CCTCGGTGAC  
ATCTGGCCTT GGCAGCCTAT GGATTINTGC CATCTCCTG GCATGAAATC ACTCCTTCTT GTTGTITTA TTTGCATTTC  
TTCAGTACC AGCGCAGTTG AGCATCTTTT CATACACTTA CTGACCATTT CTA

SEQ ID NO:2034: (Length of Sequence = 289 Nucleotides)

CCACCAAGA ACATCAGCT GTCTATGTC AAATGCTCGA CAATACCTCT CAGTAGGACG TTGTTGCAAG GCTAGCTAAT  
TTTAAATCTG GTATGAGTAA TACAGTCAA CCTAGTTAGT ATGCGAGAAA GTCGTTGCTA ACGCATGGTG AGAGGATGTG  
ACGTCACAGC ATGAGCAGTC CCTGGTTGTC CCATGTGTCAG ATAAACGTAG TNNAGTAGNT CCAAGTTTCT ATTCCAGGTC  
TCTGAACCCC AAAGCCAGGC CTTTCACTTT TGCTGGGTGG CCTGGAAGC

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SEQ ID NO:2035: (Length of Sequence = 290 Nucleotides)

CTTTTCCTTC ATCTGAACAC AGAAGGAGCC ACGGTCTGGA AAGTNTGCCT GTCCTTCCCG GGAGTGGGGA GGCCGGTGTG  
 AGTTTTGATC TTCCAGCTCA GGCAGACACC TTACACAGTG CAAACAAGAG CCGTGTCAG ATGAGAGGGA AGCGTAGACC  
 GCAGACCCGT GCAGCTAGGC GGCTGGCTGC TCAGGAGTCC AGCGAGGCTG AGGACATGAG CGTCCCCAGA GGACCCATT  
 GCACANTGGG CTGATGGCGC CATTTCCTCA AATNGCCATC GGCACCAGCT

SEQ ID NO:2036: (Length of Sequence = 241 Nucleotides)

TTATTTTATA TAAAAAGTGT TTCTGTGATT CTCAGAGCC CAGGAGTCAG TNCTGGTGGT TGGAGGGACC TGCCCCACT  
 GGTTCATTTA ACCCTCTGTC TCGGTGCCCT NAGAACCTCA GCCAGAAAGG CAAGGAGGAA ATCAGAGCAN GAGCCTCATA  
 CTCTTGGTGA TCTATTCAIT CTNIGACCTC AGGGGTGACA TATAAGGTCA GTGTTTCTCG TCCCCGCGG ATCTGCACCTG  
 C

SEQ ID NO:2037: (Length of Sequence = 270 Nucleotides)

CTATTATTTT GCATTTTTTG TAGAAGGGT GGTCTACCA TGTGCCCCAG GCCGGTCTCG AACTCCTGAG CTCAAGCGGT  
 CCACCTGCCT CAGCCTCCCA AAGTGCTGCG ATTACAGGCT TGAGCCACTG CACCTGCCC AACCTTGACT ACTTCTAATA  
 GGGATGAGTC GAGTAGCACT TNGGGGCGTC CTGTGCGGCT GGGTCTGCCT GAGGCTCCCC TCGSCCCCGT CCATGGCTTG  
 TTGTGCATCT GGCCTGAGT GCCTTGGCCC

SEQ ID NO:2038: (Length of Sequence = 151 Nucleotides)

ATTTTAAATT GAGCATTAAAG GGAATGCAGC ATTTAAATCA GAACCTGCCC AATGCTTTTN TCTAGAGGCG TGTTGCCATT  
 TTTTINTTAT ATGAAATINC TGTCCCAAGA AAGGCAGGAT TACATCTTTT TTTTTTTTTT TAGCAGTTTG G

SEQ ID NO:2039: (Length of Sequence = 166 Nucleotides)

TTTGCTGTGT ACAACCTCCG TATGACGCCA CGCCACCCGC TGTTCACGTC CCGTCGGCCT CCTGCACAGN CCACACGCTG  
 CGCCCGGAAG GCCCTGCTG TGGAGAAGCC GGACCCATCC CCGAGTCCC CAGCGAGGAC ACANACTCCA CGAGAGCAGC  
 CCTCC

SEQ ID NO:2040: (Length of Sequence = 362 Nucleotides)

GAAGTACGGT TAAATTTAGA TTTGACCATA TGGAAGATCT TTTACCAGTT GGTCTCCAAG AATGTCTTCC TTATTATGTT  
 ATTGGTCATT TTTGAGCGTG TGTGTTGGTG GGGTGGTTTC TGCCTTATAT TCCTTAACTA CATTGTATAT TTTTGTAAAG  
 AATTGGGAAT TCATTTTAAT GCTTTTAAAC ATCTTCACTG GGAACGGAA TAAAGTTATT CTGACTCTG TACCTTGAGC  
 CATTGTCAA GTACAGGGTT ACATTTTAGG TATCTAAAAA TTACTCTTTA ACTTTCACAT TCCTGGGTT AGGAAGCTGC  
 TGTTCAGGAG AAATTTCCN GGTCTCTCTG GCAATGGCT TA

SEQ ID NO:2041: (Length of Sequence = 360 Nucleotides)

CCTAATTGTA AGTNATGAAG TCGAGGAGGT GCGTGATAAT GGGCCAAGTG AGGATGCAAT GCACCAGGTG TATAAGTAGC  
 TGCAGTCACT CCAGCTTCAA TTCCAGTTC CCAGGCAGAC CTCTCTGGAG CTTGTGAGG ATGTNAGGAC ATAGTCTGAG  
 GCACATGAAT ATGATGCCA TGACCATAGT TTGGGTGCAT CCTATGTGGA TGGGGTGGGG GCGTTTCATG TGCCCGNTT  
 GGATGCTGCA TCATCCTCT CCTTTGAACT TCATCCTCT GCATCACITC ATGAGGATGC AGTCTCTGTA CTGGAGGTGC  
 TGTGGCTGGA ATATGGTGCG AAATTGGCTG GTGTGTAGGA

SEQ ID NO:2042: (Length of Sequence = 403 Nucleotides)



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GTTATTGTTG TTGAGATGG AGTTTCACTT TTNTTGCCCA GGCTGGAGTG CAGTAGCATG ATCTCAGCTC ACTGCAACCT  
 CTGCTCCCG GGGCCCAAGCG ATTCTCTCC CTCAGCCTCC TGAATAGCTG GGAATACAGG TGCCCAACAG CACACCGGC  
 CAATGTGTGT ATTCTAGTA GAGATGGGGC TTCTTACGT TGGCCAGGCT GGTCTCGAAC TCCTGACCCC AGGCGATTCC  
 CCCACCTCAG CCTCCAAAAG CGCTAGGACC ACAGGCGTGA ACCACTGCGC CCAGTCGGAA GTAATAGTTA TTAACCAATG  
 TGATGGCCGG GTGTAGGGAC CCTCGCCTGT AATCCAGCA CTTTGGGAGG CCAAGGAGGG AGGACCGCCC GNGACCAAGA  
 GTT

SEQ ID NO:2043: (Length of Sequence = 331 Nucleotides)

CCCCGTACGG TGTGGCTCTC AGCAGCCTCA CCACAGGCAC CGCAGCTTTC CCGCTGTGCA CCCAGCTGGG TGTGTGAATC  
 CCCCTGGACT GCGCCAGGC CACCTTCATC TCCCATGACA AGATGGTCAT CTCCCTCAAG GGCACTCAGA TCTACATGCT  
 GACCTTCATC ACCGATGGCA TCGTAGGTT CCGAGTGTTC CACTTTTAC AAGGCGGCCA CCAGCGTCCT CACCACCAGC  
 ATGGTCACCA TGGAGCCTGG GTACCTGTTC CTGAGTCTT GCCTGGGCAA NTCTCTCTC CTCAAGTACA CCGAGAAGCT  
 TCAGGAGCCC C

SEQ ID NO:2044: (Length of Sequence = 244 Nucleotides)

ATGGAAGATA CTAAGAGCCT CAGTCTGGAA GCATTTACCT AGGAAGCGCA TATAGACAGA GAAGATCAAG GACTGAGGCC  
 TGAGACAGTC AGCACTTAAA GGGTGAGGGG AGAAGTGCCA AGGAGACAAG GTGAGAACAG CAGAAGAGTA GCCAAGGCC  
 AGGATGTTGC CACAGAAGCC AGGAGAGGTG AGCATGAAA CAGAGGAGGA CCAGCTGCTG GGACAGAAGA GCCATATGGA  
 AGAG

SEQ ID NO:2045: (Length of Sequence = 333 Nucleotides)

GTCAGGGATT TGTCCATTCT GCTCTGGCC TCTCTGAGG CTCATAATG GGAGACCAA TCAAAAATGT CCCATGTCAC  
 TTGAGTGGGT ACACTGCCTA CAGAACCTTG AGGTTGACTC CTGCTTCAGT TCTCAGCTGT TTACCACAGC CCTCCAGGTT  
 CCAAAGATTG AGGAGCTTTC TCTTCTCTGG GAGGAAGTGT CTCANATTTA GCTTGTGTGT GTTTTGGACA GAGGCTCCAC  
 AGCGGTGGCT CTTGAGGAAT CCTCACCAGT TTGINCTCTT CCTCTGACA AGCAGCACCT GAGCAGATGC TGAGGCAGTT  
 CATTAAACCA GGG

SEQ ID NO:2046: (Length of Sequence = 274 Nucleotides)

GCAGGTTTAT GTTTTATTT ATGTATTNA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTAC AATATACTTG  
 CAGAACTGTG CTTGGNGCAT CATGGGAGCA GAGAACTTGT CCAGTGAATA GTTGTGAAG AAAGGAGTAA AATCTCCCC  
 AAACCTTAAA GGCACTCTTT TCGTAGTGTG TGTCCCATAG GTATGGCTGC TGAGCACCAG GGCTGCTCAC CATGCTCCCA  
 AGAAGCAGAG TCAGGGAGGC AGACAGCAGG GTTT

SEQ ID NO:2047: (Length of Sequence = 327 Nucleotides)

GGCCGCGATG TGCTTTTNTC CTGNTTCGC TGCCCGGGAT GCGGAATCTT GAGCCTCGGT GTCGGGTAC AGAGTTGTCC  
 TGGTGACGGG ATGCGGAGGT TTCTCTCTT TTGTTGTGGG GGCGGCTGGT GGCAGGGGCA GCTGTGGCA GGGTTGCCA  
 CGCTAATCTC CGAGTCTCTA AGGGCACCGT CTTCTCTGGA TCCCTCTTGC GCCTCTGTTA TAAAGGCAGA CCCGCGGGCG  
 CGCGCGGCA ACCTGAAATC AGAGCAGGCG TCCGTGGCGC TCAGGAACCT TGCTGAGCTT CGCCGATCTT TCATTGTTGC  
 TTCAATT

SEQ ID NO:2048: (Length of Sequence = 241 Nucleotides)

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ACTTTGTGTG TCTGATTTTA GGACTCTGGC TGGCCATGTG CTINNGGTTG CCTCTCTGC ATTTNCCACT GGATTNCAC  
TGCATCGTTT GGAGATACAA AGCGAGCAGT TCTTGGTCAG AACCTCTCTC TGCTTTTCAT TGTGTTTGAT AATGGTTACT  
GGGTCTTCT CTCAAGGTA GCAAGGCCAA GCTGATGGCT GCTTGTITAG GAGGCCATCA GTTCTTCTCT GTGGAGAAGS  
G

SEQ ID NO:2049: (Length of Sequence = 269 Nucleotides)

ATTTTITAGTA GAGACAGGCT TTCACCATGT TGGCCAGGCT GGTCTCAAAC TCCTGGCCTC AAGTGAGCCA CCTGCTTTGG  
CCTCCCAAAG TGTGAGATT ACAGGTGAGA TATTCTATAT TCATGGATTG AAAGACTCAA TATTGTTAAG ATGTCAGTNC  
TTTCTAAAGN GATTTTITAG ATGCAACACA ATTCCAATCA AAATCCCAGG NTTTTTTTGT AGCTATCAAT TGATAGATAT  
CAACAGCCAG CTGATTCTCA AATTACGT

SEQ ID NO:2050: (Length of Sequence = 170 Nucleotides)

TTTTGAAGAG AACGTCAGTT TAATAAGCT AAATGGGGAG AATTGAAGTT TGCATTTGAC ATGGTATTAA ACAAACCAA  
AGGGCTGAAA CTCATGTTTA GACAACACAG GTCAGTAGTC ACTAGGCAA GAAACAGTC CACAGCAGGT GGCACAAATA  
ATTCCTATAC

SEQ ID NO:2051: (Length of Sequence = 262 Nucleotides)

CAGGGCACAC GCAGGACCAC TGTGGATTAG AAACCCACAC GTGTCACTCG CAACATTCCT CCCACATCCA CATCCAGAC  
GGAGCCAAAT CTCATTTGTC ACCCTCAGTC ACCACCCAC AAGATGGAGC CGCTGGTTAC GACATGGATG ACAGGTGTCA  
TGACAGGGA GAGAATTINT CCCCGGATAC CCTGAGGAC CAAGGACCAC CCCAGGCTA GGGTGGGAGG ATTGAGAGCA  
GTGCAAGAAA CCAAGGAGGA TN

SEQ ID NO:2052: (Length of Sequence = 325 Nucleotides)

GAAAAAAGAT TGTTTTGTTA GAAAAAGCAA AAACAAAAA GCATTAGAAA GTGGGAGCCA CTGCACAGCA GTAGCCTAGA  
GACTGGCTGC GATATGGTAG CTCTGCCTTG ATATCATCTT CGTGTCTTCA GGCATAGAGA AATGGCAGAG GAGCAGTAAG  
ACCCACAGG AGATGGCCAG AGGNTCCACC ATCAGCCTTC TGGGACTGA GGAGGTGATC TTAGTGAAT TATTTTATAC  
TCACCTCCCC CGGGGTTTAT TCCTTCTCC AAACACTTAG TTCCAGGGCG CAGGAGACCT GTTACTAGCA CTGTATGTTT  
CTTTG

SEQ ID NO:2053: (Length of Sequence = 222 Nucleotides)

TTTCAAAAT AGTCITTAAGA GTATAAGCTG TTTTINAGG CTGTAGCCAG ACTACATAAT GAGCGGTGAA AGCGGCTGCC  
TTCCCTCTC CTGACACCAG CAAGGGGGAG GCACCATCAC CGGCCCTGCC CCATCATGCA TCCAATGATT ACTAGCACTA  
GANGCCAACG GCAAAGNCC CCGCGGCTT GCTCGTGTIT AATCCAGGTT AAGCTATACA CG

SEQ ID NO:2054: (Length of Sequence = 341 Nucleotides)

GTAAATTAAG AATATGGCCC CAGAGTTTTG TTTATCTGGG GTCTGAGCAT AGATTTTATA TTCTCTGTTG CGTTTTTAA  
ATCTAACTTT CTGTCTCCAA TGGAGAGAGA ACAGGGAGGA TACAGAAGTA TTGCAGCCCA GATCCCTAT CAGGGGGACA  
GCTGGTGGC AAAGCAGCCA CCCACAGCC TTGTGGCTAG AGTACAGTGG GGTGGACCCT CCAGCCCCAA TAGCCCTAGT  
ACCCAGCTGG CAGGGTTGCC CACCCCTGCT GTCCACCTGC TCCATCTCT AGGGGTCCA CAGGCCCTG ACCGCACAGG  
GAGGCTGGG CCAGCCTGGT C

SEQ ID NO:2055: (Length of Sequence = 258 Nucleotides)

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CTGCCCTCAGC CTCCCAAGTA GCTGGCATT A CAGGCGCCCA CCACCACACC TGGCTAATTT TTGTATTTTT AGTAGAGAGC  
AGGTTTCACT ATGTGGCCCA GGCTGGTCTT GAATTTCTGA CCTGTGATC CGCCTGCCTC GGCCTCCCAA AGTGTGGGG  
ATTACAGGCG TGAGCACCAC GCCCGGCCAA CTGTCTTTTC TCTAATGGCT GCGATGTA ATTTTTTCAC TGGCTTATTT  
ACCGTCTCCT TCTGTGGA

SEQ ID NO:2056: (Length of Sequence = 292 Nucleotides)

CTCTTGACTC CGAAGGCTGG TGACAGACAC ATAAGGCAGC TCAAACTCTT GCAACTTCCG TACAAAAGAA AAGGCTCCAT  
CCTCTTTTTT TCGAAGTAAG AATAGACTAA AGTATCCAAT CAAGTCATCT GGAAGATCCA GCTTTGCAGC TACAGCCTCC  
AGGACATCCT CAGTCTGATC TGAAGTTAGC ACGTTGACCA GAACTTTCTG CCCGTTGCTG AGCAGCACTT CCAAGGACAC  
TTCCTCTGTG GGGACCTGCT GTGTCTCCTG TTGTGCCCCA CGCAGGAAAC TG

SEQ ID NO:2057: (Length of Sequence = 293 Nucleotides)

CCAAAAAAGT TGGGTGCCCTG AAGGTGGGGT TTTGATCATG GCCAGGCTTC AAATTTAGGT CAGGCTCTGG TGGTACATCC  
TTATATGCTT GGTGCTCAGC ACAGGTCAAG ACACACAATA GACCCCTCAAT AAATATTGTC TGAATTTGAA CAATTCCTGT  
AAAAATCTCA TTAAGAGACA TCAGCTTGGG ACACAGTTCC TCTCTTACTG TTCCTTCTCC CAGAAGCTCC TGGAAATGAGC  
AGGTCTGGCG GCAGGGGGCA CACAGGGCTG CTGCTCAAAT CGGAGAATGG CAC

SEQ ID NO:2058: (Length of Sequence = 172 Nucleotides)

CITCTACAGT CAAGGAGCTC AAGCTCGCCG GCGACCCCTG CTCTGCTC CCACATTAAT GCGGCGATCC TCGGAGGATG  
ATATAGACCG GCGGCCCATC CGGAGAGTGC GCTCCAAGAG CGACANGCCG TACCTGCGAG AGGCCAGGTT CTCCTTTAAC  
CTGGGGGCGAG CT

SEQ ID NO:2059: (Length of Sequence = 245 Nucleotides)

GCAAGANGGC CGAGGGGGCC CAGAACCAGG GCAAGAAGGC CGAGGGTGCT CAGAACCAGG GCAAAAAAGT AGAAGGGGCC  
CAGAACCAGG GCAAGANGGC TNAGGGGGCC CAGAACCAGG GCAAGANGGC CGAGGGGTCT CAGAACCAGG GCAAAAAGGC  
CGNGGGAGCC CAGAACCAGG GCCAAAAAGG AGAGGGAGCC CAGANTCAGG GTAAAANGAC AGAAGGGGCT CAGGGCAAAA  
AGGCA

SEQ ID NO:2060: (Length of Sequence = 318 Nucleotides)

ATGCCCTGTT AAGGAGCTTG GGCTTGATCC TCTAGGCAGG GAGCCGTTGG AGGATTTAAG CCAGGGAGTG CTGCGGTTGG  
TCACACTCGC CATTTATGTA GATCGTTTIG GCAGCCAGGG GAAGGATGGA TTINAGGGGG ATGAGATTAG AAAGCTGGGA  
TATGAGTTAG GAGGCTGAAA GATGGTTGAT AAAAATNATC GTTGGGCAGC CGAGATAACT GACTTCAAGG ACATATACTG  
GACTTATAGC AGAGCCTGTT GAGTCTTGCT TTTGCACACA GTTCAAATAA TCACTTAGTC ATGTGGTTTA TCTTGCCA

SEQ ID NO:2061: (Length of Sequence = 331 Nucleotides)

AAAAATAAAA ATCTATAAAC TACGGATCAT AAGCAACTCC TGTTTCTGTG GGTTTCACCA CATTTCTCCAG AAAGTGAAGT  
TTTGCTCATA AAAATTACAT AGAATGTAAG CTAATTCATT TTTTAAAGTA AATGCAAAAC TAAGGGTTAC ACAAGCACTG  
AGCATCAACA CTGACAGAAT ATTAATCTG AAGCCCATTA ACTTTGACAA ACGTTTATTC ATCTTTGCCT TCTTGAAGCG  
TGTGACTATC CCAGTTTTAC AGGAAAAGCT TAAACAGAAA AAGTTAAATA ATAATCTCAA GGTAGNAAA CTAAGACATA  
ATTTCTAGCT C

SEQ ID NO:2062: (Length of Sequence = 316 Nucleotides)

438

CTAAAATCAA CCACATAATT GGACATAAAA GAATCTTCAG CAAATACAAA AGAACCAAAA TCATAACAAA CACACTCTAG  
GGCCACTGCA CAATAAAAAT ACAAGTCAAG ACTAAGAAGA TCACTCAAAA CAATGCAATT ACATGGAAAT TAAGCAACAT  
ACTCTCAAAA TGACTTTTGG GTAAATAATA AAATTAAGGC AGAAATAAAG AAGCTCTTTG AACTAATGA GAAGAAAGAT  
ACAACGTATC AGAAACTCTG GGTACAGCT AAGGCAGTGA TAAGAGGAAA ATTCTTAGCA CTAAATGCTC ACATTG

SEQ ID NO:2063: (Length of Sequence = 312 Nucleotides)

ATCCATGGCT TTAGCAAGAT CCCAGTGTG GAACTCTCT AGCAACTTGT NTCATCCAG TGATACTGGT TCTNTGGGGG  
GCACTTACAG GCAGAATCC ATGCCCCAAG TGTGGAGTG AGCGTAGAT CCCAGCCTC CACTGACAGG CAGAACACCC  
AGTCAGATAT TGGTGGCAGC GGAAAATCCA CGCTAGCTG GCAAAGAAGT GAGGATAGCA TTGCTGACCA GATGGCTTAC  
AGTTATAGAG GACCTCAGGA TTCAATTCT TTGTCTCTG AGCAGCATGA ATATACAGAG CCAACATGCC AT

SEQ ID NO:2064: (Length of Sequence = 294 Nucleotides)

TACCTAAGA ATCCTCAGAT GGGAGACCCA GCCAGTTTG NTCACAAATT AGCAGAAGTC AGCCAAAATA TAGAGAAAT  
GCGAGTAGAG ACCCAGAAAT TTGAGGCCTG GCTGGCTGAG GTTGAAGGCC GGCTCCCAGC ACGCAGCGAG CAGGCGCGCC  
GGCAGAGCGG ACTGTACGAC AGCCAGAACC CCCCCAGT CAACAACINC GNCCAGGACC GTGAGAGCCC AGATGGCAGT  
TACACAGAGG AGCAGAGTCA GGAGAGTNA AGAAGGTGC TGGCCACGGA TTTT

SEQ ID NO:2065: (Length of Sequence = 331 Nucleotides)

GAGCTGAGTT TCACCGTGT GCCAGGCTG GTCTCGAACT CCCGTTCTCA AGTGATCCTC CTACCTCAGC CTCCCAAAGC  
ACTGGGATTA CAGGTGTAAA TCACTGTGCC CAACCTGCTC AAACCTTTGG AGAGAAGCAA GTCTTCTAGC TGAACGTGAT  
AATGGCCTCA AAAGCAGTGT TGACAGCAGA TAATCTTCAC ACAGACAAAT GTCTACAGTT TCTAAATAAG CCAACTGTGC  
ATATGGCCTA CAGGCTCTTC AGCATAACCT ACCCAAAGCT CAGGTTCCT GAAGGCCAGG ACAGTACCTC GGGCCTTCAA  
GCAGCATTTG G

SEQ ID NO:2066: (Length of Sequence = 321 Nucleotides)

GTCTTGANCT CTTGACCTCA GGTGATCCAC CANCTCGGC CTCCTCAAGT GCTGGGATTA CAGGCGTGAG CAACCGCACC  
TGGCCTTGAA CCTTTGAAG TATTGATGCA AAAACAAGTG GTCAGCTATG GCCAAATTCG CAATTCAAAA AGATCCAAGA  
AAGCAAGTTG AACATCCTGA TTGGAGATGG GACACACCCA AACGTGTGTC TTGAGGTGGC TGCAAAGTCC TCCGGTCTGA  
GCCAGTNTAA GCAGGTTTAA CCCCAGCCCA TGATTTAGAG AGATGTTNAG TGCAATCCT GAGCTCAGCA GAGAGCAACA  
T

SEQ ID NO:2067: (Length of Sequence = 335 Nucleotides)

CTGGCTCTGT GGCTCAGGCT GGAATGCAGT GGGCCGAGGT TGGCTCACTG CAACCTCCAC CTCTGATCT CAAGNCGTCC  
TCCCACCTCA GCCTCTCAAG TAGCTGGAAC TACAGTGGAA CTACAGGTGG ACAACATCAC ACCCAGCTAA TTTTNTINAT  
TTTTTGTAGA GACGGGTTT CACCTGTTG CCCAGGCTGG TCTCAAACTC CTGAGCTCAA GCAATCTGCC CACCTAAGCC  
TCTCAAAGTG CTGGCATTAC AGGCATGAGC CACCGTGCCT GGCTGGGAA GTCTTTTAA CAGAGGTGAT GTAAAGTAGA  
AAAAGCAGTG GGCTC

SEQ ID NO:2068: (Length of Sequence = 274 Nucleotides)

GCAACCGAAT GGACAGGGTA AAGAAGGAAT GGAAGAGGC AGAGCTTCAA GCTAAGAACC TCCCCAAGC AGAGAGGCAG  
ACTCTGATTC AGCACTTCCA AGCCATGGTT AAAGCTTTAG AGAAGGAAGC AGCCAGTGAG AAGCAGCAGC TNGTGGAGAC

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CCACCTGGCC CGAGTGAAG CTATGCTGAA TGACCGCGT CGGATGGCTC TNGAGAACTA CCTGGCTGCC TTGCANTATG  
ACCCGCCACG GGCTNATCGN ATTCTNCAGG GCTT

SEQ ID NO:2069: (Length of Sequence = 321 Nucleotides)

GTGCCATCTG TTTACTTCTC AAATGAAAA GAATTCAGGT CTGAGTGTCC AGGAAAGGGG GTGAATTTC TAACCGCCTG  
TGACAGCGAT GGAAGGAGC CACACCCCTC CAGAGGGTAC CACCCAGCGG ACAAGTGGGG AGGAGGAAGT AGCTGGCATG  
AAGCGGCCCC ACCCAACCTC CGGGAGAGAG GAAAAGGAGA ACACGGGATG AGGAGGCTTT AAATAGTATT TCATAAAATA  
AAAATGCCCA GCACTCTTAG GAACCTCTCA TTCAACCGCC TAGTTTTTGT TTAAATAATT CTAATGCCAG AGCTGGGGGG  
C

SEQ ID NO:2070: (Length of Sequence = 161 Nucleotides)

AAAGCTGCAT AAAACAAGTT TAATTTCCAA CCAGGGTCAC AGTCATCGG TTATCCACA TTTTGGCAA GGATAGAGAA  
GGTGAGTTAT TAAACATATA CAGTCTACAT TCCAGAGGAG GAACTGCAGT TACCACTATA ACACCACAGA CAACTTTGG  
G

SEQ ID NO:2071: (Length of Sequence = 288 Nucleotides)

GTGGAAGGGC CTTCATACAT GCTTCCCATC TTCAGGAACA TCAGAGAATT CATACTGGGG AGAAACCATT CAAATGTGAT  
ACATGTGGTA AGAACTCCG TCGTAGATCA GCACTTAATA ATCATTGCAT GGTCCACACA GGAGAGAAAC CATACAAATG  
TGAGGNCITGT GGTAAAGTGT TCACTTGTAG CTCAAACCTT CGTATCCATC AAAGGGTCCA CACAGGAGAG AAACCTTACA  
AGTGTGAAGA ATGTGGTAAAG TGCTTTATTC AGCCTTCACA ATTTTCAGG

SEQ ID NO:2072: (Length of Sequence = 284 Nucleotides)

TCTGTCTTC AGACCCCTTT GCGTATGT CCGTCTAAC TGGGACCTAA GCTAAGACTC AAGGGCTGCT CCCATGCCCT  
TCAGTATCCC CCATAAAATC TAACTACACA TTAGAACTC AAAGAATAGC ATAGGCATGA TCCATCACCT GCAACAGAAG  
CAGTGAGGAG ACTTAAGCCA GGGTTCCINC AAGNGATINC ACCGACCNTT CCTGCATCTC TGNATGCCGG ACTCCTAAGC  
ATTTACTCAG ATTTTAAACA GCACATAATG CCATGGCGAG GATG

SEQ ID NO:2073: (Length of Sequence = 270 Nucleotides)

GGAGCGATAC GCCCCTGTG CGAAGGACCT GCGCTCTAGA GATGTGGTGT CTCGGTCCAT GACTCTGGAG ATCCGAGAAG  
GAAGAGGCTG TGGCCCTGAG AAAGATCAGG TCTACCTGCA GCTGCACCAC CTACCTCCAG AGCAGCTGGC CACGCGCCTG  
CCTGGCATT T NANAGACAGC CATGATCTTC GCTGGCGTGG ACGTCACGAA GGAGCCGATC CCTGTCTCTC CCACCGTGCA  
TTATAACATG GGCGGCATTC CCACCAACTA

SEQ ID NO:2074: (Length of Sequence = 278 Nucleotides)

GCACATGCCA TCAGTCTG CTAATTTTGT TATTTTGTAGT AGAGACGGGG TTTCGCCATG TTGGCCAGGC TGGTCTCGAT  
CTCCTGACCT CAGCTGATCT GCCACCTCG GCTCCCAA GTGCTGCGAT TATAGACAGG AGCCACCGNC CCCGACCTC  
TCTCACTTCT CAAATCTCTT TCCTTTTTC ACCTTCTAGG TGTCAAAGAC AGTGGATGGT CTCTGAGGTT CAAAACCAAG  
CTGACCGGGT AAGTATTTAC AGCAAAGCAT CCAATGGG

SEQ ID NO:2075: (Length of Sequence = 232 Nucleotides)

GTCTCTAGGA TTCACTCAA CCCAGGATCA CGGTTTGTG ATGTATCAA GGCAATGATT TGGATTTTCA AGCTGGCCCA  
GTGAACAACA AGCAATCAAG CATTCCTTTC TCTTCTTTC TCTCTCTCAC ATATACACAC AACTCTTTC TCTCTCACGT

TACTTTCACT GTCACTTTCT CTCTACTGGA TAACAGGCCA AAAGTACTGG CACTCATCTT TCACTTTCTT CC

SEQ ID NO:2076: (Length of Sequence = 223 Nucleotides)

GTCACGAGGT CAGGAGATCA AGACCATCCT GGCTAACACA GTGAAACCTC ATCTCTGATC TATTCAGGGC TCINACTTCT  
TCCTGGTTTA GTCTGGGTG GGTGTATGTG TCCAGAAATG TATTGATTTC TTCTAGATTT CTAGTTTATT TGNGTAGAGG  
TGTTTATTCT CTGATGGTAG TTTGTATTTT TATGGGATCA ACGGTGATAT GCTCTTTATC ATT

SEQ ID NO:2077: (Length of Sequence = 323 Nucleotides)

GTCCCCCTTC CCCCTGTGTG AGACCAAGCT CTGTCTCAGG AACAGGCCTG AGGGAGGAGG AGCCACGTTT CTCCTTCCCT  
GGAGCCCTGA GGTGGCCAGG CTGTCCCCAC ATAAAGCATG ACATCCAGGT GCCAGCTG3C TAAGAANTGG AGCCTGAGGC  
TGCAGCTCAC CACCTGTACC TCACAGATGT CCATTCAGAG GAAAGAAGGG TGCTCCAAAC GCCAGGCCCC CAAGGAGCAC  
AGACTCAGGG TCCAGGCAGG TTCAGTGCTA GTAGGCAGGT GGGCACTGCT GTCCAGGAAA ACCTGGTGGG CAGCTGTTTT  
CCC

SEQ ID NO:2078: (Length of Sequence = 310 Nucleotides)

AATTTGCAGT TGTAAATCA AACCTACTGA CATTTATAGT CCCTTACTTT CTCTTCTTTC TTCCATTGTA AATGTCTGAA  
ATGTCGTACA GTCATACTTC CCACTGTATT TTTAGGTTTT ACTCTCATAC TTCAATAATC ACTACCACCC TTTATTTCAA  
TAAAGTTTT AAGTCAGTGC TGATTTTTTG GTAGCTCCCA TTTTCTGATA TATTTGTCAT GTACATATGC AAGTGTATGT  
AATGTAGGTG TGCATCTATA TATACCCACA TATACATATA TACATATACA TATATATGTC CATATACAGC

SEQ ID NO:2079: (Length of Sequence = 281 Nucleotides)

GAGACCTGCC AGAAGATTAA AAAAAAGAAT GAGAGAAAAG CCCAGTATGT GGTGTGCAAA CTTACTTCCT TTAAATGTCC  
CATGGATGTA GGACAGTGCC ATGTTTCAAG ATGCCTGTGA GCTAGTCTT CAAGATTTAT AGAATGTTAC TTATGAACAA  
AATATAATTA TTTATGGTAC AATCTTTGTA CTTTAGCAAA TCTGGAGTTA GTTCATAGTC AAAGTCAGTT AATATTTCTT  
AGAGGAAAGT TTTGGCTTTT TGTGGCAACA TTTTTATAGC T

SEQ ID NO:2080: (Length of Sequence = 311 Nucleotides)

ATTAAAAAGA ATATTATTTA TTATCTNCTT TATTAATACT CACATGTAAC CTTTGCTTTT TACACAAAAG TCTGCTTTAG  
AAGAATGCCT CCNCGGCTTA TCATGCCCAA TGGGGCTTTT TGTTCGTGGA CCACTTCCCC TTCTCCACC CCCACCCCA  
CATCCAAAT ACTCTTAACA TGTTACAGA TACCACGNAT ATTTTGTAAG CAAGNTTGG GTTACTGGAA CTGATTTCA  
TTAACATCCC ACTTCAAAAT GGAAGGCAGG TGGAGGGCAG GGTAAAGNAA TAGGGGAAA GAGGGCAAGA G

SEQ ID NO:2081: (Length of Sequence = 207 Nucleotides)

GGACGACGC TCGTGCCAT CACCGCTGGG TGGTTTTTTC CCCCTAATT TTTACTTAGC CTTTTGGTT TGINTCCCCA  
CCCCACCTC CTCACCCCT TTCCAGTTCT TCTTCAGGCC CCTCCCAGAC GCACCCAGC GGCCCTGCA GCCCCTGCCT  
CCAGCTCCA GCCTCACCTT TGTGCCAGA CTCGCATTG GAAGACT

SEQ ID NO:2082: (Length of Sequence = 260 Nucleotides)

TTAAAGAAA GTGCATATT ATTGCAAGG AAAACAAATG GAATAGACAA AAATTTTGA ATATAAGAC TTTTTNCA  
TTATGTATGT GTTTACAAT CAAAATAATA AAGCTAGTTA AAAGTCAATA CATATTAGAT ATATTCAAAT ATTTNCCAA  
ATAAATTCG ATCTTATCAG TTAACACCA TAGCAAAAGA CTAAGGAGTA TTTGTATAAC ATTAGGGTAT TTGACCTCAT  
ATTCTATTCA TTTGGTTTA

SEQ ID NO:2083: (Length of Sequence = 257 Nucleotides)

AGTTTCATAT GTTTATTAAA CCAAGCATGA GGCCCTTCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GCGTGCTCAT  
GAGGCTGGGC GTGCCCGCCA GAGACCTTTC TAAAATGCAG ATTACGACT CTCCTCCTCA AGCCACCCTA GTGGCCAGTG  
GGGTCATTTC GGATCAGAGA TTCCTGGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTINAGGA  
ACTAGCTGCT AGGCTCT

SEQ ID NO:2084: (Length of Sequence = 255 Nucleotides)

TATTATACAG CATTGTCAAG ATTATTTGAC AAAAGGCAGT AACAAGCCGA AGGAAAACAC ATTTACAAGA AGCTGAACAA  
CTGTATCAG AACATACATC AAGGTGAAGA GTTCGGCCC TCTTGGTATA GGGTATGTAT GTGTACATCT CCAATTTTGA  
ACAATGATGA CATAAGGCT AATACTCTAT TTATTCAGGN GACCCCATAA TCAGGATAAT AGTAGGCATT CAGAGTAATA  
AAGTGATCAC AGTTG

SEQ ID NO:2085: (Length of Sequence = 290 Nucleotides)

GGACGCACGC TCGCTGCCAT CACCGCTGGG TGGTTTTTTC CCCCTAACIT TTTACTTAGC CTTTTTGGTT TGTGTCCCA  
CCCCACCTC CTCACCCCTT TCCAGTTCT TCTTCAGGCC CCTCCAGAC GCACCCAGC GGCCCTGCA GCCCTGCCT  
CCAGCCTCA GCCTCACCTT TGTGCCAGA CTCGATTG GAAGACTCA CCTCCCGCC AGGCCTGGC TGTGGGCGG  
TTGGAGATT AGGTTTTAAT CCACACAAGC CCCAGTGAGG GGTGAAGCAT

SEQ ID NO:2086: (Length of Sequence = 342 Nucleotides)

AGTTTCATAT GTTTATTAAA CCAAGCATGA GGCCCTTCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GCGTGCTCAT  
GAGGCTGGGC GTGCCCGCCA GAGACCTTTC TAAAATGCAG ATTACGACT CTCCTCCTCA AGCCACCCTA GTGGCCAGTG  
GGGTCATTTC GGATCAGAGA TTCCTGGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTIGAGGA  
ACTAGCTGCT AGGCTCTCTA TCCTGGGAGA AGAAGGTGAA GGTTCGCAA TATCAATTTT CCCAACTCAG CCAAGATTTT  
CCCAGCATCT NCAGGACAAG TG

SEQ ID NO:2087: (Length of Sequence = 306 Nucleotides)

TATTATACAG CATTGTCAAG ATTATTTGAC AAAAGGCAGT AACAAGCCGA AGAAAACACA TTTACAAGAA GCTGAACAAC  
TTGTATCAGA ACATACATCA AGGTGAAGAG TTTCGGCCCT CTGTGTATAG GGTATGTATG TGTACATCTC CAATTTTGAA  
CAATGATGAC ATAAGENCIA ATACTCTATT TATTCAGGAG ACCCCATAAT CAGGATAATA GTAGGCATTG AGAGTAATAA  
AGTGATCACA GTTGAATGAA CGTGTTCACC AAAAGTCTTA GACCAACCTG ATATCATCTT ACACCT

SEQ ID NO:2088: (Length of Sequence = 326 Nucleotides)

ATTGAATAAC TTAGGCAATC TTCCACTTTG ACTGAAATGA TTAAGATCAG TTTACCGAAA GTCATTTCAT CCTTGCCCTG  
CAGGCATCTG GCTATTCTTG GTGCAGGGCT GATGGGAGCA GGCAATCGCC AAGTCTCCGT GGATAAGGGG CTAAAGACTA  
TACTTAAAGA TGCCACCTC ACTGCGCTAG ACCGAGGACA GCAACAAGTG TTCAAAGGGT AAGCCTGCTC TCTCTCTTG  
CAAGAGTAG AATGTCTTT GTTCTTGGT TAGTTGTTTT TTGTGGTGGC TTGGTGGGT TTTTGTGTTG TTTGTCTTG  
CCATCA

SEQ ID NO:2089: (Length of Sequence = 291 Nucleotides)

GGGTTTCCCT TTCCACTCAT CGGAGATTCA GAGGGATGAG CTGGCACCAG CTGGGACAGG GGTGTCCCGT GAGGCTGTAT  
CGGGTCTGCT GATCATGGGA GCGGGCGGAG GCTCCCTCAT CGTCTCTCC ATGCTGCTCC TGCGCAGGAA GAAGCCCTAC

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GGGGCTATCA GCCATGGCGT GGTGGAGGTG GACCCCATGC TGACCCTGGA GGAGCAGCAG CTCCGCGAAC TNCAGCGGCA  
CGGCTATGAG AACCCCACTT ACGCTTCCT GGAGGAACGA CCCTGACCCG G

SEQ ID NO:2090: (Length of Sequence = 293 Nucleotides)

TTATGTGGAA TACCACACGC CCTGGTACAT GGCTGAACTC TTCCCCTTCA TCCTGCTTGG GGTCTTCGGG GGCTTGTGGG  
GAACCCCTCTT CATCCGCTGC AACATCGCCT GTGTCAGGAG GCGCAAGACC ACCAGGCTGG GGAAGTACCC GTGCTGGAG  
GTCAATTGTG TGACTGCCAT CACTGCCATC ATGCTTACC CCAATCCCTA CACACGCCAG AGCACCAGCG AGCTCATTTT  
TGAGCTGTTT AATGACTGTG GAGCCCTTGA GTCTTCCAG CTCTGTGACT ACA

SEQ ID NO:2091: (Length of Sequence = 274 Nucleotides)

CTTTTGGAAT GGTCAAACAA TTTAAGTCAA ATGTTTTAAT GGTGCAATTA AAATAAGGGT TCAAACATGT TTTCAATATA  
TTAATTINCTT TAAAGTCATG TTCAGGCAAG GTGCTGTTA AAAAACCCTT ATTAGCTTTG TCCACACATG TAAGTTATCA  
AAAGTTACCA AGGTAATTTT GACGTTGAAT GCAGCTTTAA ACAATAAAAA AATGGTATTA GGTTTACTTC TCGAAGCAAA  
GAGAGCCCCC AACCTTGTA ACTAAACATT CTGA

SEQ ID NO:2092: (Length of Sequence = 290 Nucleotides)

GGTACGTAGG ACGCTGGCCC TGTCCTCCGG CCGNCTCTGG TCAGACACAA TCATGGTCTC CACCACGAGG TGTGCAATGC  
CTGGNAGGGT GGTGTGCTCC AGGTCCAGGA GGGCAGATCC ATGGGCGATG GTCTCTCTGA GCTCCAGAAG GCTACGGAAG  
GAGAGCGAGG CAACATGGGG CTTCCTCCAG CGCTCCGTCT CCTCTCCAC GTCTCTCTCA AACTTGATCC AGCGGGCGGT  
CTCCCGCCAG TGGGGCTCCT GGCTGCGGTC CAGCATCAGC TCGTTCAGCT

SEQ ID NO:2093: (Length of Sequence = 323 Nucleotides)

AGCTACACTG ATACAAGTGG ACCTAAGAA ACGAGTTCCG CTACTCCGGG ACGAGACTCC AAAACCATCC AAAAGGGATC  
AGAAAGTGGG CGTGGGAGGC AGAAATCTCC TGCACAGAGT GACAGCACAA CACAGAGAAG AACTGTAGGC AAAAAACAAC  
CCAAAAAGGC TGAGAAGGCA GCTGCTGAAG AGCCTCGTGG AGGCTGAAG ATAGAAAGTG AAACCCCTGT AGACTTGGCT  
AGCAGCATGC CCTCCAGCAG ACACAAGCA GCCACCAAAG GCTCAAGGAA ACCCAATATA AAGAAGGAGT CTAAGTCTTC  
CCC

SEQ ID NO:2094: (Length of Sequence = 255 Nucleotides)

AAGGATGTTT TGTTCCCTG CCTCAAGGCC GGCCATGTGG GAGTTGTATC TGTGGAGTTC ATTGCCCCAG CCTTGGAGGG  
AACGTATACT TCCCATGGC GTCTTTCTCA CAAAGGCCAG CAATTTGGGC CTCGGGTCTG GTGCAGTATC ATAGTAGATC  
CTTTCCCTC CGAAGAGAGC CCGATAACA TTGAAAAGGG CATGATCAGC TCAAGCAAAA CTGATGATCT CACCTGCCAG  
CAAGAGGAAA CTTTT

SEQ ID NO:2095: (Length of Sequence = 305 Nucleotides)

GCACTCCAGC CTGGGCAACA AGAGCGAAAC TCCATCTCAA AAAACAAG AAAGAACTN CTGAAGTCGG GGGCTGCTAG  
AGGATTTTCA GGAAGGGTCA ACACAGSCCT CACTTCCAGT CCTCATTTT CCAGCTACA GAGTCACCAG AGGGTGAGAA  
GCAGAACGTG CCAGCAAAGA GGGAAAAGGC CACAGAACCA CCTTNTCTC AATTACAAAG GGGTGATTT CAGAGGAGGG  
AATAGGGATG GAGAGGAGGA GAAGACTGCT CCAGGAGCCA GATAAATTCA AAGTCACCA GATGG

SEQ ID NO:2096: (Length of Sequence = 327 Nucleotides)



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CTAGATATAA CTACCCITCT CTATTCTCA CCTAAATCCT TATACTGCTG ATGACTTTGG AAAATAGTAC AGGGTTTTAC  
 AGTCTAATCA TGACAATACA TCTCCAGNT CCTGAGCCA AATACATTCC TCAGAATACT TTTTTTAAAA AACTGAAATT  
 GATTACTTGT ACTTTGTCAT CACCAAAAAT ATCTGTAGCA AGACATACTG TTCTCAGCAT CCACTTCTAC CATCCTCACT  
 ATTGTAACTC ACAGTAGACT ATGCCTCTA CTTTACTGAA AAGATACAAA CCATTACCTA GCAATCAATC TTCCACCTTA  
 AACATAT

SEQ ID NO:2097: (Length of Sequence = 296 Nucleotides)

CACCCCTGCTG AGGTCAATTT CGTCACTGAT GCCTCGGGTC ACATAGGCCC TGATGACCCA GATTTACAC AGAGGTCACT  
 ACATCGGTCA ACTTTCTCTC CAGGAGGGGC CGGGCTGGT GGGCCATGCC CACTCCGTGC CACATGCCTA GCATTGAGAG  
 CTTTGTAAAG AAGCCCTGTT CTAAATGCTC AGGTCCCACC CTTCCTTGTC AAGAGAAGCC ATGGGCTTCC TGCTCCTGTG  
 TCACAGTGTG CCACITGAAG GGTCCTCTT CCCATTCTT CTTCATGGG GGCCAG

SEQ ID NO:2098: (Length of Sequence = 324 Nucleotides)

ATTGGTTTIN TTGAGTGTIT TCTCTTTTT NTITGTTTT AACATACTTA CTGCGTATAA AGTCATGCAA AGAAAACAGT  
 GCAGACAGTA GATCCTAGTG GATGTGCCAA GGTATTCCAC TCAGAGTCAA TCCCAGGGAA AGAGGGAAAG AGGAAAAGAA  
 AGAGAGAATG CGAACCCGAG GCTGCAGGAT GAGGCATGAA GAGTAGAAAT TCCAGTGTCT TTGCTGTGGT CATCAGACGC  
 CAAGGGGAGA GAGGCAATNA AGACACACGC TCACGGGCCC CCCAGAGGTG GGTGGGGGGT GCTGGGGGGC GGCACACAGA  
 TATG

SEQ ID NO:2099: (Length of Sequence = 299 Nucleotides)

GAAACCGTCA GTAAGGAGCT CTTTATCTTT ACCTTCCCAC TCCAAACCTA CTGCTAGCT GTTCTTATCA TTGCTCTCTT  
 TTTCTCTGTC ACAAAAATGT GTTCCATCTT AATGAACACA TTTCAATTAAT GTCTTCTTA ATGAAGGACA GTCCCTTCTC  
 CTGTGCTGTG AATCCCATAG TAATGACATT AGCTTAAGTT TTCTGAGCAC TTGCTATCTG CCAGTCTCTC CCATGAATTA  
 TCTTGCTTAA GCTTTCAGT ATACCTGTGA AATAGGTGGC AGTAGTTGTC CCACCATAC

SEQ ID NO:2100: (Length of Sequence = 308 Nucleotides)

GGCAGCTTAT TTGGATTGG TTCAATGT GGATCAAACA GGAAAATCTG TTATCATCAA CAAGACCAGC AGCACCAGAA  
 TTNCCGAGT CTCCAGCAG TGCAGGCTCC TCAGGNTCCG TGTCCCGCAC CCATCCACCT CTCCAGAGCA CACCCCTAGT  
 CTCAGGTGTG GCAGCTGGCT CTCCAGGCTG TGTGCTTAT CCAGAGAATG GAATAGGGGG CCAGGTGTCT CCCAGCAGCA  
 CCAGCTACAT CCTCTTCCA CTGAAGCTG CAACAGGCAT CCGCCTGGG AAGCAATCCT TCTTAAAT

SEQ ID NO:2101: (Length of Sequence = 291 Nucleotides)

GATGATGATT GCATGGGGTT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTCTTAC ATGINTTGGT AGATAAATGT  
 CATAGACTGA TCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC  
 TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTTGG TGATATGGCT  
 TTGGNGCCCA CGCATAGGAC TTCCACAGAA CTTTTTCAA GGCAATCACC C

SEQ ID NO:2102: (Length of Sequence = 323 Nucleotides)

GATGATGATT GCATGGGGTT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTCTTAC ATGINTTGGT AGATAAATGT  
 CATAGACTGA TCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC  
 TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTTGT GATATGGCTT

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TGGTGCCAC GCATAGACTT CCACAGAACT CTTCAAAGCA ATCACCAGAA ATTTGATTCT TTCATATTTT ACAACTTTAT  
AAT

SEQ ID NO:2103: (Length of Sequence = 270 Nucleotides)

CCTTTCACTC CCCCGCCCTG GGCTCTGCT CTCTTGCTG GNTTCCTTCT TTTTGAGGG AAAGAGGGTG GGGCTGCAGG  
CAGTCTACTG GCAGGACGGG AGGCTGAGTC CTCAGGGTCT CACACCCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA  
ACACCAACAC GTAAGGACCT AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT NTGACTNGGC  
CAGGGCACAC GTTGGTCTCG GCAGTGGCTG

SEQ ID NO:2104: (Length of Sequence = 367 Nucleotides)

CCTTTCACTC CCCCGCCCTG GGCTCTGCT CTCTTGCTG GCTTCCTTCT TTTTGAGGG AAAGAGGGTG GGGCTGCAGG  
CAGTCTACTG GCAGGACGGG AGGCTGAGTC CTCAGGGTCT CACACCCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA  
ACACCAACAC GTAAGGACCT AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT GTGACTGGGC  
CAGGGCACAC GTTGGTCTCG GCAGTGGCTG TAAGGTACCC TTCTTNTCTC TGGATGCTGS TTTCAACCAT CTATATATGG  
CATCCACGCA TGGGATCTGC AAGCTGGAGC CCTCTACCC GCAGCTT

SEQ ID NO:2105: (Length of Sequence = 288 Nucleotides)

GCAAAATTAC TGAACTACT ACTTTGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT  
CAGCAAGGGT GTGATTGAGG AGCCCAAGTA GCGCTGCNC TTGNTGGTG GATCCAACAC CAGCCCTGCG TCGTGGGACT  
TGCTCANAT CAGCTGCGA CTGCAAGATT CTTACTGCAG TAGAGAACTC TTTTCTCCC TTGTACTTTT TTTTGACCTG  
GNATCTTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTG

SEQ ID NO:2106: (Length of Sequence = 349 Nucleotides)

GCAAAATTAC TGAACTACT ACTTTGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT  
CAGCAAGGGT GTGATTGAGG AGCCCAAGTA GCGCTGCNC TTGNTGGTG GATCCAACAC CAGCCCTGCG TCGTGGGACT  
TGCTCAGAT CAGCTGCGA CTGCAAGATT CTTACTGCAG TAGAGAACTC TTTTCTCCC TTGTACTTTT TTTTGACCTG  
GCATCTTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTGCA AGGAAAGCTG CCGTCTCTTT TGGCAGTCTT  
GATGCAGAGC CTGCACTCTG GCACTCGCT

SEQ ID NO:2107: (Length of Sequence = 329 Nucleotides)

GTGACAAGCT CCAGAAGCCC GNTCGCAAC ANCCAGGAGG GCCAGGCCAC TCCAGGCAGG AGGCAGTGGG CTGGCAGCCA  
CCCTGGGCAC AGAAGAGCAG ACGCAGACAG TGCTGGGCAA CGAGGGGCTT TTTTCATGGG CCGCCTGCG CTGTCCCTCC  
CCCCAGGTCC CCACCTTCTA GGGTTAAAGT GCAGCTGGGA GGGAGGAGGC AGGCAGAATT NGGGAGCTAG AGAGAGCCCA  
AGTGAACCTT GACTGTCCAC GCAAGTCCCA TGCTCTCTC GTCTGGAGT TCCTCGAGGT TCAGCGAGCC CATCCGCTT  
AGGGCCTCT

SEQ ID NO:2108: (Length of Sequence = 261 Nucleotides)

TTTTCATGGC AGCCTGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTTA ACCTTCTGG TTAGAAGACC  
TGAGCCTCCT GACTTCCGGT CACTGGATAC TCTCTGTVAG GCTCATGATT TAAACTCTGT AGTCACTGCT GGCTTGGAA  
CCTCTAACTC TCTCTGCTC TTGACAGTGT TCCCTCAAGG GAGTCCATTA GCCAGGACTA GGTACATGC CCCTGTGTTA  
GCTGTGAGGG ACAAGGCAGA G

SEQ ID NO:2109: (Length of Sequence = 329 Nucleotides)

TTTTTCATGCC AGCCTGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTTA ACCTTCCTGG TTAGAAGACC  
TGAGCCTCCT GACTTCCGGT CACTGGATAC TCTCTGTTAG GTCATGATT TAAACTCTGT AGTCACTGCT GGCTTGGAAA  
CCTCTAATC TCTCTGCCTC TTGACAGTGT TCCCTCAAGG GAGTCCATTA GCCAGGACTA GGTACATGC CCTGTGTGA  
GCTGTGAGGG ACAAGGCAGA GAAATAACTG CCCAAGTTCA GCTTCCATA ATGTTTGGGG GATGCTATGA CTCAACTTTC  
ATCTATTTT

SEQ ID NO:2110: (Length of Sequence = 271 Nucleotides)

GGCTTGAGCA GACAGAACGG GGAAGACTCC ACTCTGTCCC GAGGGGGCCAG CCGCAGTTCC CCCAGGGCCA CCTGCCCCTG  
AGGTCCTTGT GTGGCCGCC TGGCTTGGCA GCCCTGCCCA CGCTGCCCC GCAAACAATG GTGTGTGGGT TTTTACAGCC  
CTTTTAGGA ACCCAATATG GGCATAAATG TAACACCTGT AGCGGGGGCA GATTCTCTGT ATGTCAGTT AACAAATAT  
TTGTAATGTA TTTTTTTAGA AATCTTAAAA T

SEQ ID NO:2111: (Length of Sequence = 315 Nucleotides)

GGCTTGAGCA GACAGAACGG GGAAGACTCC ACTCTGTCCC GAGGGGGCCAG CCGCAGTTC NCCCAGGGCC ACCCTGCCCT  
GAGTCCCTTG TGTGGCCGCC CTGGCTTGGC AGCCCTGCC ACGCTGCCCC CGCAAACAAT GGTGTGTGG TTTTACAGC  
CCTTTTAGG AACCAATAT GGCATAAAT GTAACACCTG TAGCGGGGGC AGATTCTCTG TATGTCAGT TAACAAATTA  
TTGTAATGT ATTTTTTTAG AATCTTAAAA ATTGCCTTG CACTGAAGTA TTTTCATAGC TGTTTATATC TCTT

SEQ ID NO:2112: (Length of Sequence = 275 Nucleotides)

GCAAGANAGA CCAAAACCTA ACCTGAGTTA CAAGAAACAA GACAGTAATG GCTATAAAGG GAGTGACCAG GAGCAACTGG  
GACACTCCTT TACCTCCCAT ATCCAATGTA TGINTTTCAC AGAAAAACAA CAAATTAAC AAATTCACAA AATACAACAG  
CTAGAATTAC AAAATCCATT CATCCAAGGG TGGTAGAAGG CAGGATGGNA AGGTGGAAGG GTAAATNGCA CAGGGAGAAA  
AACAAAGTGT TCCAATCAGT CCAGGCACAG GACT

SEQ ID NO:2113: (Length of Sequence = 227 Nucleotides)

GGCGCATCAG TGGGGGGTGC TGTCAAATT AGTGAAATCA GATACAGTTG ATGGGCAGGG AGGTGGGGT AAGAGACAAC  
TCCAGTGAG TGCCAGGTGG GCAGGCTCCC ACTGTTCCT TGAGACGCTC CTCCCCACTC AGGTGGGGAC AGGGGACACA  
CTCGCAGGGC AGGGCATTCT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGT

SEQ ID NO:2114: (Length of Sequence = 339 Nucleotides)

GGCGCATCAG TGGGGGGTGC TGTCAAATT AGTGAAATCA GATACAGTTG ATGGGCAGGG AGGTGGGGT AAGAGACAAC  
TCCAGTGAG TGCCAGGTGG GCAGGCTCCC ACTGTTCCT TGAGACGCTC CTCCCCACTC AGGTGGGGAC AGGGGACACA  
CTCGCAGGGC AGGGCATTCT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGTGGG GCAGGAGGGA  
AGGCCAGTTC GTNGGCAGGC TGAGGAGGGA ATATNACCCC CCTCAAGTCC CCAAAGTGGC AGGCAAGTTA AGGGGCCCTG  
GATGAGGTGG CCCCTCATG

SEQ ID NO:2115: (Length of Sequence = 262 Nucleotides)

TGGAACACAA AATCCCTGT NTAACATTG TACATCGGG GCCTAGCTGC CCTTGAGGAT GTCTAGTTA CACCTCTCT  
GATACCTGTG GAGTTAAGC ACCATTCTTA CGCTGTGTC CCTTNGGAGG GGTGTCAGTG GAAGCTCTTA AAGGGGAATG  
CTTGCTCTGC CTCTGTGGCT TTTGTGTTGG GAAAGGGAGT TNGGATNGA GGATTTAGAT TINAGGTCAT GATGTCAGAG  
CACACCAGGA ACTCCAAGG CT

SEQ ID NO:2116: (Length of Sequence = 153 Nucleotides)

AAGAAGCGAA GAGGATTGCT GAGCTGGAGC AGCGCAANAC ACGGTGCTGG TGACAGAACT CAAAGCCAAG CTCCATGAGG  
AGAAGATGAA GGAGCTGCAG GCTGTGAGGG AGAACCTTAT CAAGCAGCAC GNGCAGGAAA TGTCAGGAC GGT

SEQ ID NO:2117: (Length of Sequence = 231 Nucleotides)

GAATATAATG TGTATCTNCA AGGTCGATC CACCCITNCC CATCCTNTGG AGCTCAGAGA TTCTTGGGAG CTGAAGGTCT  
TCTTAATGTC AGATCAGCAA CCCCAATCTC AGGCAGCTCG GATTGCTGTC TCTCGATCTN CCGCTGGCCA ATGTAAAACC  
AGACGCAGGC GACCCAGTGC GCGACAGGGC GAACACGGCC ATGAGCAGTG TCAGCACCAC GCGCTGTAC T

SEQ ID NO:2118: (Length of Sequence = 309 Nucleotides)

CGGGAAAGAA CAAATTGGAA TGGTGGGGGA TATGGGTGTG TGGTGGGGGC GGGGCAGGAG GTCTCCGGG GTCCAGCATG  
GGTCGGGAGT GGGAGCAGGA CAGAAGGTGG CCACGTACA GCGACTGAT GCTCAGCTCA AGGGGAGTGT GAAGAGGTG  
GCAAAGAGCT GGGAGCCGG GCAGAGGGAC AACACTGACT NAGGACATTN CAGTTGGGAA TCAGAAAAA AGGGGCAGCT  
CAGGGGCATC TGATCTGCTT CATTTTGA AAAGAAACAG AGTAATGTAC AAAATTCTGG ATATCTTCT

SEQ ID NO:2119: (Length of Sequence = 308 Nucleotides)

GGTAATCGTT GAAGATTACC AAAGTTTAT TTGGAATGAC ACAGCACTGA AAACATAATT GTTACAGATG ATTTGTGGAT  
ACAGCATACA CCATCTATTT TACTTTAGAA CAATCTGTGA AGATGAGTTG CATAAATAGA AAGAGGTGGA AATATAGAGG  
AGCTGTTTTT ATAGTGTCTT TTGGGGGTA GATGAATATG CCCATCTTT CTACCCAATC TCATAAAGGC AGAAGAGAAG  
ACTGCTTAGC TGCCCATCCC AACTAGCCTA CCTCCAGCCA CAGCGGCTGG ACAGCTAGAT AAATCAGG

SEQ ID NO:2120: (Length of Sequence = 237 Nucleotides)

CCGCTCTCCT GACGGGAGCC CACTAGGGGG TCCTCTTTCA TCTTTGGTGT GGCCTTACCT CCCACCAAAG AGATCCGAGG  
CTTACTCTTC TCTCTCTGGG ACCAGCATGA CCCAGGATC CTTCCAGGAG AGCTCTGTGA AGGAGCTGAG GCGGCTGGAG  
GACCAGCTGG CCGGCTGCA GCAGGAGCTG GCGGCTCTGG CACTGAAGCA GAGCTCGGTG GCGGAAGAAG TGGGCCT

SEQ ID NO:2121: (Length of Sequence = 224 Nucleotides)

GCGGTCAGAG GCTGAGGCCA GAGAGGTAGC AGCGGAACIN ACAGGGAGGC CAGGGGCAGA GCTGACCCTG GAGAGGGATC  
CTNATGTCCT AGACACATGG TTTTINTCTG CCTGTGCC CTTTINTGCC CTGGGCTGGC CCAAGAGAC CCCAGACCTT  
GCTCGTTTCT ACCCCCTGIN ANTTTGGAA ACGGCGAGCG ACCTTCTGCT GTTCTGGGTG GGCC

SEQ ID NO:2122: (Length of Sequence = 202 Nucleotides)

CAGCTGCAGC TTCCAACCA GAAACCTCA AAGCATTAGG GAAGGAGCAG GTGTGGGGCT GGGGTGGGA GAATCCCTTA  
AGCTCCAGGG CCCAGGTCT AACCTGAGAG GTCGGGGCTG CAGGAAGCTG GGGGAGGCTC CCGGGCTGG GGAAGAGGA  
GCCTGCCCCC AGCAGAAACA GCAGTCTCA GCGGTACAT GT

SEQ ID NO:2123: (Length of Sequence = 359 Nucleotides)

ATTCTCCTCT GTTCTCTTGA TGTGTAGGGA AATTTGAAGA ATGACTCTGA TAAAAATCTA AAAGAGAAAC ATCGAATCCT  
AACTGGCTGT GTGACCCATA AACCTTACTC CGTCTCTTG AACCTCAGAT TTCTCAGGEC TTGGCACATA GCAAGCATTT  
CATACTCAGA AGCTGGTACT ATTACTGTTG TGTTTGTGG GGGAGGTTT GTTTGTTTG TTTGGAGACA GGATCTGGCT

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TTGTTGCCCT GGCTGGAGTG AAGTGGGCGC ATCATAGCTC ACTGCAGCCT CGCCCTCCTG GGCTCCAGCG ATCCTCCCGC  
CTCAGTCTCC CGAGTAGCTG GGACCACCTG CGGATGCCG

SEQ ID NO:2124: (Length of Sequence = 233 Nucleotides)

GAAACGCCGT GCATCTCTTG TCTGTTGGCA GCGAGCACAT CGTNTGGAGA CACGAGTTTC TAAGCAGCTG GCAAGAGGGC  
TGCTGACGGC ATGGGTCGTG CTTGAGGGTG GCAATACCTC TTAGGAACTT AGGGCAGGAA GCAATACTTC AGCATTGAAT  
GTGTGTAAAT AGTTGCTTTG AGTTGCAATT GCTATTINCT TCTCAGTCCC AGCTCAGATC GAATTATATA TCC

SEQ ID NO:2125: (Length of Sequence = 241 Nucleotides)

GCCATGGCTT TTGGTCAGGT TCAGGGGGGC TGAGGGGGTG CTCCTCCCTT CCCCCAGGC ACTGACACAT TGAAAGGAAG  
CAGAGCAACA ATGACACAGC ACGGATGTGG GAAAGGGGAT CCCCCACGC GGCAGGATGG TCCATCTCAC CGGGGTCTCA  
CCAGGACTCC CCGCTCCAC CCAGGGCCAG CAGGAGCACC TCCCGTTTC TCCCAGTGC AGAGCGTGGG GTGACAGGAG  
T

SEQ ID NO:2126: (Length of Sequence = 275 Nucleotides)

GTGTGCCCTC TTGCTGTGTC TTACTTCATA AGGAGTTGTA TCTTCCCACC TGCATTTCAT TACTGCCGGT TAGGACCTAA  
GTAGAAGAGC AGTAAAGGCT GATTGACACA CAGGGGGATG GAGTTGGTCC TTGTCCATTC TCTACCCCTT GCTGTGCATG  
TATCAATCCT TATCCAGAA GGTACTATTT AGACTGTATA GACTGATTGA GATTACATAC TTAGAGGAT TAAGGAAACC  
ATAGAGTTTG GGCCTTGGAA CTGTTACTGC CTTGT

SEQ ID NO:2127: (Length of Sequence = 296 Nucleotides)

TTCAGCCTTA TCGAAACACA TGAAGCAAAA CCATTGAAAC TGTATGTGTA CAACACAGAC ACTGATAACT GTCGAGAAGT  
GATTATTACA CCAAATTCTG CATGGGGTGG AGAAGGCAGC CTAGGATGTG GCATTGGATA TGGTTATTTG CATCGAATAC  
CTACACGCCC ATTTGAGGAA GGAAAGAAAA TTINTCTTCC AGGACAAATG GCTGGTACAC CTATTACACC TCTTAAAGAT  
GGGTTTACAG AGGTCCAGCT GTCTCAGTT AATCCCCCGT CTTTGTACAC ACCAGG

SEQ ID NO:2128: (Length of Sequence = 322 Nucleotides)

GCATGGGAGG GAGGAAGAGA GGTITGGGGT GCGGTGGCAG GTGATATAGG GAAAGGGCTC ACGTTTCAGA ATCTGTGAAC  
AATTCCATTT TTCATCAGAT AGCAGAACAA CTACACAGC AAAACCTAGA ACATCTCAGA CAGCAGCTCT TGGAGCAGCA  
ACAGCCTCAA AAGGCCACTC CTCAGGATAG TCAGGAAGGA ACCTTTGGGT CAGAGCATTG AGCGTCACCA TCACAAGGGA  
GTAGTCAGCA GCATTTTCTT GAACCTGAAG TCAATTTGGG ATGATTCCAT AGATATTGAG CAACAGGATA TGGATATAGG  
AT

SEQ ID NO:2129: (Length of Sequence = 222 Nucleotides)

TTTAGTGGGT CTGGGGTGGG CGCGGCCCCC GGCTAACGGG GCGGGTCTCC TCCTCTAGGC GCAGGAGTGC GCGGTGCTCT  
CCAGGCCTCC CCGGCTAGGT GGAGCGTGAC ACCGCAAAGC ACACCGTCTT ACCGAGGCGG GSCCCAGGCG GCACCAGCCC  
CTCCCCAGAT GGAAGTGCCC GGCAGACAGC TGCCCAAGAC CTCACAGAAC AAAGATGGAC AT

SEQ ID NO:2130: (Length of Sequence = 191 Nucleotides)

GTGGGATGCT TTATTTCACT GTGGCGGGGA GGGAACTGG ACAGGGGGCG GCAGGCGGGG TGGGNGGCTG GCACTCAGGC  
GGGGACTAGG CAGGGGAAGG GCTGCCCCCA GGCCTGTGTA GGAGAACTN AGGCCAGCCC TGGCGGAGAC CTAGCCACG  
GGGGTAAGGA GGGTGGGGGA AAAGTGGGTC T

SEQ ID NO:2131: (Length of Sequence = 280 Nucleotides)

CTGAGTCTTG TCGATCCCGA CCAGGAAGAG CAGCTCAGCC AGGAAGAGGT TGATGCACAG GTTCTTGTTG ATGGTGTGTC  
GGTCGGTCTG CAGCCCCCGC AGAAGCAGAA GGTGGAGATG CAGATGGCCA AGCAGACCAG GGAGATCACA ATGCCACCCC  
AGGTGATGAC CGACAGCAGC AGCTCGTTGA TCGGGCCCTG GTAGATCTCA CCGTGAGCCA TGAGCACAGC GAAGTTGGTG  
AGGTGGCTGC AGGCACACGT GGTATGGGTC TTGTTGGACT

SEQ ID NO:2132: (Length of Sequence = 201 Nucleotides)

ATCCCCACAC CATTGCCTGC TCTCCCATG GGGCTTTAGC TCCCCTGACC ATCTGCTCAT GTAGCCTCTG ACTGGGCGCA  
CAGTGGTGCA GGAGGAAGGA CCGGGAACCC TGTGTGGCTT TGGGCAAGCT GACAAACCCG TCTGGAATCT AGTTTCCCA  
GCTGTGAAAT GGGGCCAGTC CCCATGCCCT GCTGTCTCC T

SEQ ID NO:2133: (Length of Sequence = 180 Nucleotides)

GATGAAATG TTGTGACCAG AGGCTTGCCA TTNCCTAACT CTATTTGCCA GAGGAGCAAT AGTTCTGTAT TCGCTAATTT  
TGTGTTTACA GAGACTTTAA GGAACATGAC TGTTGGGAAT AACAAGAATT AAAGGTATTT ATTTACTTNC TCTATATGAT  
TGTAATATTA TACCCATACT

SEQ ID NO:2134: (Length of Sequence = 302 Nucleotides)

ATGAACAAAC GGGACTATAT GAACACTTCG GTACAGGAGC CCCCTCTTGA CTACTCCTTC AGAAGCATCC ACGTCATTCA  
AGATCTGGTA AATGAGGAGC CAAGGACAGG ACTACGACCA CTGAAGCGTT CAAAGTCGGG GAAATCACTG ACCCAGTCCC  
TGTGGCTGAA TAACAATGTT CTCAATGATC TGAGAGACTT CAACCAGTIG GCTTCACAGC TGTGGAGCA CCCAGAGAAC  
CTGGCCTGCT TCGACCTGTC CTTTAATGAC CTGACTTCCA TTGACCCTGT CCTAACAACT TT

SEQ ID NO:2135: (Length of Sequence = 291 Nucleotides)

TCTTACCAAT CTGACATTCA CTATCAACCA CTTCTTGACA CATGTCATAG AAAAGTGACA TCTCTTTCCC TTCAACCAAT  
ATATCTTCCA ACAACATCAA CCTCAACAGG TAGCTAGCAT TGCTTCTGT TGAAATTTAG AGCTGGAAGA AAGGATTTCA  
CAATCTCTCT GTGGAGACCC AGGAATCCGT TACCTTCTGG GATTTTAGAG AGTGTGGAGA GAGATGAGCA GGCAGTGAGC  
CGGGGACCAA CTCCGATAAG AATATGAAGT CAGGAAGTGA GAGAGGAAAC G

SEQ ID NO:2136: (Length of Sequence = 282 Nucleotides)

GCTGTACAAG GTCTTTTCT TTGTTGTCAT GGTGATTTT GTACATTTC GCATTTGCAT CATACAAAGG GGGGAGCAAC  
AGCCATGGCT TTTGGTCAGG TTCAGGGGGG CTGAGGGGGT GCTCCTCCCC TCCCCCAGG CACTGACACA TTGAAAGGAA  
GCAGAGCAAC AATGACACAG CACGATGTG GGAAAGGGGA TCCCCACGC GGGCAGSATG GTCCATCTCA CCGGGTCTC  
ACCAGGACTC CCCGCTCCA CCCAGGGCCA GCACGAGCAC CT

SEQ ID NO:2137: (Length of Sequence = 322 Nucleotides)

GAATTGACAA CATATTGCCA AAATCTTAGT GGATTTTGCC AACACTATTC TGCTGATAGG AAAAAAGAAT CATTGAGCTA  
CTTTCCAATT TAGCCACAAA ATAGGCTCTT TTTCTTCAT TACTACTTTA ACCAGTATGT TAATACTGAA AATAGGTATA  
AAGAAATCAC AAATAACCTT CTTCTGTTT AAGGAAATTT AAAATAGCAC ACTTAAATTG AAAGTNAAGG GAACTTTAAT  
TCACTACTGT AATTTTAAAA TGTCGTATC ATGTAGTGT TGCACAGTTT TAACCTTAGT TTACCATCTC TTACTCCTTA  
GT

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SEQ ID NO:2138: (Length of Sequence = 305 Nucleotides)

ATGCTGAGTC GCAGTTCCGA TGTCTTATG CTTCCATCAG CAAATCTCAA TTTGTCAAGA TTCATGACAG ATTCTTCCCC  
AGCGTTTGGT TTAATTGGAG GGACTTTATC TCCAGGCCCTG CATGACTCTT CGATGCTCAG GGCACATGCC CGACCAAAGA  
CAACCAGGTC CAAGAGCGAG TTINCCCCGA GCGGTTTGGC ACCATGTACC GAGGCACAGG CGGCTCCCC ACAGGCGTAC  
AGGCCGGGCA CAATCTGATC CTGGCCATTC ACGTGCCCTCA GGACCTGCCC CTGTAGTTG GTGGG

SEQ ID NO:2139: (Length of Sequence = 263 Nucleotides)

CGGCCCCCAG CAACAGCTTC AGCCCTCTCC ACCAAGCTTG CCATCAAGGA GATTGCACCA CTGCACTCCA GCCTGGGTGA  
CAGAGTTAAG ACTCTCATGG GGACACTACT GTTCAAAGG CCCTGGCCAA ATAACCTCCA AATGAAACAC TCAACCCAAG  
GATGTTTTCA GCCCACTGTT AGTGAAGCTG GGTGCAGAAAT GCAAAGCCTC TAAAAGGAGA GGATACAAAG TCAGGTGAGT  
AGGGGCCATT GGCAATGCTC AGA

SEQ ID NO:2140: (Length of Sequence = 255 Nucleotides)

CTGCTTCANT CTGCGCCCT CAGCTGTGGC TTCCCGCAT GCCTGTGAC CCCAAGCCGC AGGTACAGGA AAGAAGTTTG  
TGCTGGGGGA CTCAAAGACC CAGAGGTAA TTAACAGGAA CCAGGGCCAG GGGCCTTCAT CTAGAGGTCA GTGGAGTCTC  
CAGGGCACTC ATCACTGTGG CTGGGAGACT ACAGTGCTC GGCTGCGGAC TTGTGGAAGA AGAGGGGGAA GGATGGGAGA  
AGGGGTGACT GGATG

SEQ ID NO:2141: (Length of Sequence = 355 Nucleotides)

TTTAATTAAA TACCACITCA TAATGTIATT TGCACCTAGT ACTTTTTTTT TTTTAAATAA GACATGCCAT AAGTOGTGAA  
GTTAACAAA TATAAGCATC CGCACAGAAT ATATTCTAAG GTGACTTCAT TTACACCGCT TCTCAGAGAA ACACACAAGT  
AACCTTTTGT CTGCCATCA GCCAGTGTG AAACAGCTTT GGAATTCACA TGAAGGCTG CCGGGCTGGT TCCCCAACAC  
TNGCTGATG GAGTCTGTG TCCGNACCGT GCGTCAAAC TGGCTGGTTT CCACTAGAAA AGCAATGGAG AGTCAGCTCT  
CCCTTCITTA CCCAGCGTTC AACTCCACAC TGCAA

SEQ ID NO:2142: (Length of Sequence = 391 Nucleotides)

CTGCTAAGTG CCATGAGACC TTAGCAGAGG CTGTGGGTGC CCGCCCCAT TCCCTCCACT CACTCTTCCT TGCAGGTGGA  
CCTGCCCTTC TTGCTGAGG CCTTCTCTG CCTCCAGAGC CTGCTTGGTC CTCAGGCTGT AAGTGCAGGC AGAGCTAATG  
TCTCTCATA GCTGCCCTCC ACCAGCCTGC TCTGAGACA CCTGCTGGCC AGCAGCCTGA AGCAGAATCC TTTACTCAGA  
TTCAGCCGCA CAGATGCTCA CTGCAGAGAT CTCCAAGGNC TGTGGTCAAT CTGAGCCCA TCTCAGATTT GTGTGGATAG  
GGTGTAGAG AACATGGAAT CAGCTGGATA GAGTGGTTCA TGCTTGTAAT NCCAGCACTT TTGGGAGGCT T

SEQ ID NO:2143: (Length of Sequence = 326 Nucleotides)

GATGCAGAAC AGCTTCTTGC AGAAGCACCT GCTCCGGCAT CCAGCGCTGC CTGGAGGCAG GAAGGAGAGG CAGGGCAGGA  
CACGCTGGTC TGAGATGAGG GGGAGCCCCA CGGGCCCCAG GCAGGCTAGA GGAGGCACAG GCCTGCCAC GGCCAACTCA  
GGTCAGCCAG CCTGAGGCTG TGGCCTCCAA AGGGTCTGGG CGCACCCCC AGGTCCGAGG TINTGAGGC CAGCCAACCT  
GCAGAGCACT CGCGGCGTGG GTGGGCTGAG TGGAGGTGCC TGGGAAGCTG CCTAAATTCA GAAGCCTCCA CTTGCCATGG  
AGACTG

SEQ ID NO:2144: (Length of Sequence = 357 Nucleotides)

GCACCGGGCC CCAGGAGCCC ATCAGTGACA GAGTGCTCCA TGATGATGTC CTCCACCCGG GTGATGTACA GCAGCGTCAN  
AGCACCCCCA GGAAGTGGGA NAGCAGGATG CCCAGGAGGA TGCCCGCCAT GATGGTGTAG TTGTCCATGA ACCAGATGAT

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CACGGCGTTG GTGCAGCCCC GCACGTAGAT GACATCCTGC AACTGAAAC GCTCCTTGTC GATAGTTTTN TAGCCACACA  
 TGGTGTGAC AACTTCTGTC GTGTTCTGA TGCAGCAGGT GTAGGGCACC CCACAGGCCA GGGGTCCAGG GGCCTGACG  
 TCGTGGTACT GATTCTTGCT CCAATCTCGG TAGTCTT

SEQ ID NO:2145: (Length of Sequence = 420 Nucleotides)

CGCCAGGAGC TGCTAGCCAA AGCATTGGAG ACCCTACTGC TGAATGGAGT GCTAACCCCTG GTGCTAGAGG AGGATGGAAC  
 TGCACTGGAC AGTGAGGACT TCTTCAGCT GCTGGAGGAT GACACGTGCC TGATGGTGTT GCAGTCTGCT CAGAGCTGGA  
 GCCCTACAAG GAGTGGAGTG CTGTCATATG GCTTGGGACG GGAGAGGCCA AAGCACAGCA AGGACATCCG CCGATTCAAC  
 TTTGACGTGT ACAAGCAAAA CCTTCGAGAC CTCTTTGSCA GCCTGAATGT CAAAGCCACA TTCTACGGGC TCTACTCTAT  
 GAGTGTGAC TTTCAAGGAC TTTGGCCCAA AGAAAGTACT CAGGGAGCTC CTTCGTTTGG ACCTCCACAC TTCTGCAAGS  
 CCTGGGCCAT ATGTTGCTGG

SEQ ID NO:2146: (Length of Sequence = 390 Nucleotides)

CCCAAATACT GTTCCCAAA CTATGTCGGG CGGCCGAAGC ACATGCGGGT NATGGCTGGA GCCCTGGAGG GGGACCTCTT  
 CATCGGACCA AAAGCAGAGG AGCACCGGGG GCTGCTGACC ATCCGCTACC CCATGGAGCA CGGCGTGCTG CGAGACTNGA  
 ACGACATGGA ACGCATCTNG CAGTACGTCT ACTCCAAGST TCAGCTGCAG ACCTTCTCGG AGGAGCATCC TGTGCTCCTC  
 ACGGAGGCCG CGCTCAACCC GASTAAGAAC CGGGAGAAGG CGGCAGAGGT GTTCTTTGAG ACCTTCAACG TGCCGGCCCT  
 GTTCATCTCC ATGCAGGCTG TTCTCAGTCT GTACGNAACA GGACGCACGA CAGGAGTGGT TCTAGACTCA

SEQ ID NO:2147: (Length of Sequence = 219 Nucleotides)

TTGTGGTTG GAGAGAACT GGTGTTCTGC CCGGCTCTGC TTGGTCACAG ACAGCTCCAG CAAGAGCAGT TGTTAAAGT  
 GCCAAGCGTG TGTATCACTG TGACAAGCCG TTGCTTACT GCCCTGTTCG CTTCNAGCCA AACCAGCTGA TGAAGAAGT  
 CTGCCAGGNG GGTCTACAG CAGGTCAAA ATGACCTAGT TTCATTTTAA GCAGACAGA

SEQ ID NO:2148: (Length of Sequence = 353 Nucleotides)

GAAATCTTTA TTACAAAAT ATTTTGCAAG CCAAAAAGTT TAAGTTGCAA CTATATACAA AATGGGGCCT GTTCCCTCC  
 CAGCAGTCTT AAAATAAACT CCTGAAACCA TGCTCCTTCC GCAGGTGGT TCGACCTCTT CCTTTTCTG GGGTTCAATA  
 CACAAGGTAT GTGGATTCTC CAGGTTGCCA GGCTAAAGCT AAAGCTATAC ATCTTCTTG GCCTTATTCC CTATTTTCCC  
 CCTCCAAGAA TTAATAAATA AAATAAAATG AAAATGGCAC CAAGAAAACA TTCTTTTAAA ATACTGAATG TGTGTGTGCA  
 TCGTGTGCA CAGTATGTCC CTGTTCTCTG GGT

SEQ ID NO:2149: (Length of Sequence = 394 Nucleotides)

GGGGAGACTT TGGGCTTTNN TCATGACTGT TTGGGTGAA GGTAGCTCAA GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT  
 GTGTGTGTGT GTATGTGTGT AAAGTGCTAA GAACGTGTGA TTGACATCCA AACATTTCTT GTACAAAATT TCCCTAGCAA  
 AGCAAACCTG CTTTGACTTA ATTTATTTGT TAAATGTTGC ACTTTGTTTA TGTATGTTTT GTTTTTGGTG GGGAAATAAGG  
 AGAGAGAGGA CGACAAATTC TATTGAAGTA TTTATTTTGT GAAGATGGCA ATTTTGCAAT TGTTTAAATA TTTTTCATTC  
 NNITAAATTT GTTATCAGTG CCAGCCCAAN ATACCTGCTC TACCATTAAT TTGCGGGCCT GATAAAAAGG GTCC

SEQ ID NO:2150: (Length of Sequence = 200 Nucleotides)

ACCTCCCTGG GCTCGGAGA CGCTGACAGC TGGGACGACA GCAGCTCCGT CAGCAGCGGC ATCAGCGACA CCATAGACAA  
 CCTCAGCACT GATGACATCA ACACCAGCTC CTCCATCAGC TCTTATGCCA ACACACCTGC CTCCTCTCGA AAAAACCTGG  
 ATGTGCAGAC TGATGCTGAG AAGCACTCAC AGGTGGAGAG



SEQ ID NO:2151: (Length of Sequence = 369 Nucleotides)

GTGCGCCCCA GTCCTTCTGA AACCTGATAT CACACTTCGG GCAGTGTCCC CTCTACAGTC AATCTGTGTT TTCAGAAGTG  
GCCCCAGGTT CACTGTCTTT ACAGCAGTCC TAAAGAGCCG GCTGCCCTTT CCCTAGGCTT CCTGTCTCTT NAGGGCTAAA  
TTCAGCCCTT CCTACCCAG TGCCACTTGG GTAAAAATAC TCTGCTCTTC TCACGTTTGC TAATAAGCCC GGGCTCCGAC  
TACCACCGTT CGGGGAAGG GAGCCCTTA CCGTCATTGC TGGGTCCGCT CCGGGAAAAC ATGTGCCGGA CTTGACTTGT  
GCGGCGGCAT CTTCCGGAA ATGCCGTTT TGTTCCTTC TAAGGGTGT

SEQ ID NO:2152: (Length of Sequence = 312 Nucleotides)

TTCACAAACA AATTGTGGGA GAAACACACC TTCCAGCAA TAGAAAATCT CTATAAAGTG CATTTTGCTT GCAACCATCT  
CTTCCCCATG CTGGCCCTTG GGTGAGATT TGAGGCACTG TTCCGAGGGA GCCCTCAGGG CCACCTGAGC TGGGAGAAGG  
GAGGCATGAA GCCACCATGG AGCTCCAGGC TACTGGACAT ACCCTCTCTA CCTGCCCCCT CCCINTTGGC TCCAGGAGTG  
CACTGCCTGA CTCCACTGGC AGGTTGATCT GGGAACGGC TNGGCATGCT AGGGATGGTG GAGAAGTAGG CG

SEQ ID NO:2153: (Length of Sequence = 325 Nucleotides)

CCCAGACCCA GAATGTAAAT NAGGCCAAA TGGCCACTTC CCAGGCTGAC ATAGAGACCG ACCCAGGATAT CINTGAACCT  
GACGGTGCAA CTGCACAGAC ATCAGCAGAT GGTTCOCAGG CTCAGAATCT GGAGTCCCGG ACAATAATTC GGGGCAAGAG  
GACCCGCAAG ATTAATAACT TGAATGTGA AGAGAACAGC AGTGGGGGAT CAGAGGCGGG CCCCACTGGC TTGCAGGGAC  
CTGGNGTCT GCACCACTTC CAGTGACCAC TTCAGAACCC ACCTNGGNGC ACCCCCCAAT GTGCTCTGGC AGACGGCATT  
GGCTT

SEQ ID NO:2154: (Length of Sequence = 326 Nucleotides)

ATCATTTAAT TAACATCTTT AAATGAAACA CAGTTTTCTT CATGTGTCTC ACTCAGGCTT CAGGGCAGAG GGAATGGATT  
TTTAGACATA TCAAGACTC AAAAATTAA AGAAATATAT ATATGTATAT ATATACTTCT AACATTTTAT GGAAATTAA  
AATCAGAGGC TTTTGGTCTC TCCATTTACT CTAGGTCAAG CTCATTTACC CCAGAGGACA AAGAAGGGCT GCCTCTCTA  
GACCTCCCT TCTCTTTGT CTTNGTCCC ACCCAGCAGG GAAACAAGCT CAGAAGGATC CTAACAGGAT AGAGTTTCCA  
GTAAAT

SEQ ID NO:2155: (Length of Sequence = 317 Nucleotides)

TGGATGAGGA GACCTGAAC ACACCTGCT ACTGNCAGCT GGAGCCAGG GCCTGATACA TCCTGCTGGA CCAGCTGGGC  
ACCTAGTTTT TCACGGGCGA GTCTATTCC CGCTCAGCAG TCAAGCGGCT CCAGCTGGCC GTNTTCGCCC CCGCCCTCTG  
CACCTCCCTG GAGTACAGCC TCCGGGTCTA CTGCTGGAG GACAAGCCTG TAGCACTGAA GGAGGTGCTG GAGCTGGAGC  
GGACTCTGGG CGGATACTTG GTGGAGGAGC CGAAACCGCT AATGTTCAAG GACAGTTACC ACAACCTTGC GGGCTCT

SEQ ID NO:2156: (Length of Sequence = 372 Nucleotides)

CTTCAGCTG GCAGCCAGT GGCCACCCA TGTCAAGCAC TTTCCAGTGG GACTCTTCAG TGGCAGCAAG GCCACCTGAG  
GCCCTGINTC CCAGCCACTT TCCCTCCTGG CACTGCCACC AGCCTCACCG AGTGGGCGA TCTCGGCTCA CTGCAGCCTC  
TGCTCCCGG GTTCAAGCAA TTTTCTGCC TCAGCCTCCT GAGTAGCTGG GACTATAGCC GCGTGCCGCC ATGCCAGCT  
AATTTTGTG TTTTAGTAG AGACAGGATT TAACTATGTT GGCCAGGCTG GTCTTGATT CCTGACCTCG TGATCCGTC  
TCCTCAGGCT TCCAAAATG CTGGGATTAT AGGCATGAGC CACCACAACC GG

SEQ ID NO:2157: (Length of Sequence = 351 Nucleotides)

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CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGTAGCCCCA  
GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGCAGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC  
CAGCGTCCCC TCCAGTCTGC ACGGGGCACT CCTCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGGC AGGCAGCCCC  
CCTCTATCCC TCCCAGCACC TACTACATCG NCCNACAT CCTGATTCC TGTGTATTATG GAAACTNITG CCAGAGATGG  
AGGTCTCTC GGAGTATCTG GGAAGTGTG C

SEQ ID NO:2158: (Length of Sequence = 280 Nucleotides)

CAGCTCCTGA GGACCGCTGC AGTGATGACA CAGGACTATT GCATCAGCAT CTGCTCACA GGAATCAGA GCTCAGCCAG  
GAGAGGTCCA AGAATGACAG AACCATGAGC ACTCCTACCA AAACCTCAGCT CTGCTCAGCC AAATCAACAA TTCAACCCAA  
CAGGNCAACT CCTAACACAT CCCATCCAGA CAGACATTAG AGGCGCACAG CAGATGAACC TCCTACTTAC ACTGTCCAAG  
GAAGCTGGAC TATCAATTCC CAGTAAAAGT GGGGGAAAGG

SEQ ID NO:2159: (Length of Sequence = 342 Nucleotides)

CTGTGCGTT TCTCTACCA GATTGTGCAT GCCTCTGTG GGCAGAGCCT GTNCTGACTT GCTCCTGGGT CTCCAGCATC  
ACCCAGTCTG GAGCTGAGGA CCTGGGTACC TACAGATTTC CTCCCACT GTCAGAATTG AGATGAAGGA AGCCCAGAGA  
AATCAAGTAC CCTCCACCAG GCAGAGCAA GTCTCTGGTG CCCAAATCC AGGGAAGGCA AGGGCTGGGG GTACAAGCAG  
AGGATCTGAA GAGGTATATG AGAGTNGCCA GCACAGACCT GGCATAAGCT TGGTGCTCAG TGAAGGTTAC CTGATGTTGC  
TGGGCACCAG GGGTGATGCA GT

SEQ ID NO:2160: (Length of Sequence = 376 Nucleotides)

ATCTTAAGAC ACATATGGAA AACAATAGGG TAGAACTTAG TAAACTACAA GAATATAAAT TGGAGCTAGA TGAAAAGGCA  
GTGCAGGCAG TAGAAAAATT AGAAGAAATC CATTTACAGG TTAGTTTTTT AAATCAGGTA AGTTTATCTG TAATGTGCTT  
TCATTTATTT CACCGCAAAT TATATTTTGG ATATGTATAT ATTATGTTTC CTCTGCCTCT CTTGTAGCAA TTGTCTTTGT  
AGAGTTCTAG AAAAAAATG GCATCTGTTT TTCTTTTAA ATATTTCAT TTCCATTATT ATTATAACAA AATCAATCTT  
TCAGAGTAAT GATTCTCACT GTGGAGTCAT TTGATGATTA AGATCCAGTT GGCATA

SEQ ID NO:2161: (Length of Sequence = 404 Nucleotides)

CCTTCCTCG GTTCAACTG GACTTCTATC AGGTCTACTT CCTGGCCCTG GCAGCTGATT GGCTTCAGGC CCCCTACCTC  
TATAAACTCT ACCAGCAITA CTACTTCTG GAAGGTCAA TTGCCATCCT CTATGTCTGT GGCTTCGCT CTACAGTCTC  
CTTTGGCCTA GTGGCCTCCT CCTTGTGGA TTGGCTGGGT CGAAGAATT CTGTGTCTCT CTCTCCCTG ACTTACTCAC  
TATGCTGCTT AACCAATCT TCTCAAGACT ACTTGTGCT GCTAGTGGG CGAGCACTTG GTGGGCTGTC CACAGCCTGG  
CTCTTCTCAG CCTTCGAGN CTGGTATATC CATGAGCAG TGAACGGGC ATGACTTTC CTGCTGAGTG GATCCAGCT  
AACC

SEQ ID NO:2162: (Length of Sequence = 339 Nucleotides)

CATGCTTIT TTGTAGCTTG GGATCTAATT TGTAACACCT TGCTACCTAT GAAAAGTGGG AATGTAAAAG GGAAAAGCA  
ACTTGGCATT TACTAACTT AGGCTAACCA AAACCTCTG TAGAGATCCT TACTAGACAT GGGTGCAACA GCAAGCATCC  
CAGAGGACCC ACCACTGGG TATGTTTTAG GCCAATGGAG CAATTCAA TTTGGCTAAA AGAAGAAGAA ACTCATTTAG  
TATGGCAATA ATATTTGCGT TCGACACAAA GTGGCAAACC AACACATTG GCCTAAACAT GGTCTATAT GTTATAATGA  
TACTTTACAA TTAGACTTC

SEQ ID NO:2163: (Length of Sequence = 285 Nucleotides)

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CCCCGCCACC TCCAGCAGGA GCAGCTCAGT TTGTGGCTCT GGGAGCTCCG CTTTTCGAAA CCCAAAAGG CTGTGCATTT  
 GGAAGCCAAA CGCTCAGCAT GCGGCTGCCG AGTCTGTTT TGTGGACAAA GCAAACTGTG GAATGGCTTC TCGGTGTCTG  
 TATAAAGGGA CAAACGGTTG CATTCAACCCT TTGTACTATA ACACCGCTTC TGCAATCGCC ATATCCGTTT TTAAACCTTT  
 TTGTCTCCGG GGAACCTCTC ATTCGATTAT NATGCTCTCT GATGA

SEQ ID NO:2164: (Length of Sequence = 296 Nucleotides)

ATGTTTGTA AATCATTCTT TTTCTACAA TATTTCTAAT AAGAAAGCTT ATAACAGCAC TTTATTGACA CCTCGGACC  
 CGGGGCAGGG TCAGCAAGAC TCCCAGCTGG CATCAGACTG TGTCTGGCCT GCTGTGCCA TCCCTGAGGG GTGCAGGACA  
 GAGCCCCATA GGGCAGAGAG GCCTCCCTGG GACCAGAGGA GGATGCTGTG CAGCCAGGCC CATCCCCAGC ACTCGAGGCC  
 TAGGAGGAGA GGTGGGCTCT GGCAGCGGT GTNAGGTGGC AGTGAGAAGC CAGGCC

SEQ ID NO:2165: (Length of Sequence = 310 Nucleotides)

GTTTTGTGA TGTMTTCAA ATAATGTTTT TCIGTGTGTG TTTTTTINCT TTTTTTGGAC AGGNTCTCAT TCCATTGCC  
 CAGGGTGGAG TCAGTGGTG CGATCTCAGC TCACTGCAGC CTGACTTCC CAGGTTGAGA TGATTCTNCC ATCTCAGCCT  
 CCGAGTACC TGGGATTACA GGCACACACC ATCATGCCCG GCTAATTTTT TGTATTTTA GCAGAGACGG GGTMTTGCCA  
 TGTGACTCAG GCTGGTCTCG AACTCCTGGG CTCAAGAGAT CCGCTGCCT TGGCCTCCA AAGTGTGGG

SEQ ID NO:2166: (Length of Sequence = 361 Nucleotides)

GATGGAACT GGAAAAAAA TAATTGTAA GCAACAATTT TAGATTTTTT TATGGAGGAT AGAGACATTT GAATCAGATA  
 CCAAGAAATG TATAGTAATC ACTCAGATAG AAAGATGCTT AAAATGGATT TTAAATGGGA TCGGGGAAAG CAAGGTGCTG  
 AACACATGC TGTACATACT ACTTATAAAT CAAAGCAAAC CACTAGCAAA CTGATGTCAG TACTAACACA GGTTGAAGTG  
 GGATTGTGGC GGAGGGGAGA GGTAGTINAGG GTAGACTTAT TTGTACCATT TTATTTTTTG ATATTTCTTT TATATACAGA  
 TACATAAGTC TGTATATACA TGTATGTCCA ATTATCTCT T

SEQ ID NO:2167: (Length of Sequence = 325 Nucleotides)

TCCTGGGCTG TGCTCTGTTT GAAGGGGGCG CCCTGCTCCC CTCAGATCAG TCAGGAGGAA GATGACTAAG GGGAGGGATC  
 CTCTGGGTGA TGGCCTCTTC CTCTCAGGG ACCTCTGACT GCTCTGGGCC AAAGAATCTC TTGTTTCTTC TCGAGCCCC  
 AGGCAGCGGT GATTACAGCC TGCCCAACCT GATTCTNATG ACTGCGGATG CTGTGACGGA CCAAGGGGC AAATAGGGTC  
 CCAGGGTCCA GGGAGGGGCG CCTGCTGAGC ACTTCGCCC CTCACCTGN CCAGCCCCCTG CCATGAGCTC TGGGCTGGGT  
 CTCOG

SEQ ID NO:2168: (Length of Sequence = 348 Nucleotides)

GGAGAACCCT TCGCGGAGGA AAGGCGAACT AGTGTGGGA TGCCACCAA CTGGGGGAGC CTCTTGCAAG ATAAACAGCA  
 GCTAGAGGAG CTGGCACGGC AGGCCGTGGA CCGGCCCCTG GCTGAGGGAG TATTGCTGAG GACCTCACAG GAGCCCACTT  
 CCTCGGAGGT GGTGAGCTAT GCCCCATTCA CGCTCTTCCC CTCACTGGTC CCCAGTGCCC TGCTGGAGCA AGCCTATGCT  
 GTGCAGATGG ACTTCAACCT GCTAGTGGAT GCTGTCAGCC AGAACNGNTG CCTTCCTGGA GCAAANTCTT TTNCAGCACC  
 ATCAACAGG ATGACTTTTA CCGCTCGT

SEQ ID NO:2169: (Length of Sequence = 392 Nucleotides)

ATTTTGTGA GGTCCAGTTT GGGTGGCAGA AACTAAGACA CTGAGCTGAT GAGAGAACTT GTTGCTTTTC GCCCTGCGCA  
 TTTATTATTT TATTTATTTA TTTATTTTTG TATTTTTAGT AGAGACAGAG TTTACCATG TTGGCCAGGC TGGTCTCAAA  
 CTCTGACCT CAAATGATCC ACCCACCTCG GCTCCCAA GTGCTGGGAT TACAAGTGTG AGCCACCATG CCCGCCACC

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TGTTGCATCT TTAACAGCTG TGTITGGAAA AGGGTGAGGA ATTGATTCAT CAATATTCAA TACTAAGCTG CAAAATCAGG  
AATGCAGCCA ATTGTTTTAA TTGATCAAGG CTTATAAACT CTTAAGGGAC TCTA3TGAAC TGATACAAAC TA

SEQ ID NO:2170: (Length of Sequence = 273 Nucleotides)

GTGTTGTGTG ATGCTGTGTG TGTTCCTTC TGTITGTTTT TCTTGCAATG GTCAGGTCCC ACTCTGAACT CCGGGGGGCA  
CCAACTGAT GCCAGTAGGA TTGCCCTGT ATAGGGTGTG TGACAACCCC TGTGAGGGT CTCACCTGT TGGGTGGCAG  
ATGGAATAGG ACCCATTTAA TGAAGCACTT TNCCTTGG TGGAGGTAGT GTGCTTTNCT GGGGAAAAC CCCTTGTCT  
GGGCTGCTG GATTCTCAG AACTACCAGG AGG

SEQ ID NO:2171: (Length of Sequence = 357 Nucleotides)

GTGATGTACC CCAGCACTAG GGAATGATGT GAGTAAGACC TAATCCCTGC TCTCAGGGAG CTTATAGCCT ATGGCAGCAG  
CAACACTAGT AAAAATTTAC TACTTTGATA GGTGCACATC TTCTTTTGGT CAGCAATTTT CTCAAAACCA CTGTAACAT  
TTACTAAAT GCTAAGCTTT GATTGTTTT CAACACTTC TTGAGAGTTT CTGCATGTAT GATAAGGGCA AGACATTACA  
CTGAGGTATT GATGCTGATG AGCAGCAAGG CTCCTGGCT GGTGAAGGGA TACTGATTAG CACACCAATG TGCTGCTCTT  
GAACACACAC CTCCACAAA TTACAAATTA TCTTCCA

SEQ ID NO:2172: (Length of Sequence = 381 Nucleotides)

GAAGAAGCCC CATGGAGCTA AGGCCTCAGA ACACCAAAGT CTGGACTGTC TGAGGGCACA TGCTAATAAC AGGAGGCTGG  
CAAAGTGGCC AGCTCCCATG CCTTTGCATG CATTINTCTT TACCTCTGTC TGCTGGGAA CATCTTCCA GGAGCAATCG  
AGTCAACAGC ACCACAGACA CTGCTATTCC GTTGAGAAAA GTTTTATATG GAAACACATA CTGATCATGA ACACAATAAA  
CAGGGAGGGA AGCTCGGGCT CAGCCAGGAA ACCTGCCACA AGGAAGATGT TTGGAATAT CCAGGAGTAG TGTCAAACAC  
TAACACCATA TTTACAAGTC TAATTTGGAA CTTGGGCCCT TTTAAGTGC AGGAGGAAGT T

SEQ ID NO:2173: (Length of Sequence = 351 Nucleotides)

GAAGTTCCGG GAGCGCTGA AGGAGCTCGT GGTCCCCAAG CAGTTCATGG ATGTTGTGGA CGAGGAGCTG AGCAAGCTGG  
GCCTGTGGA CAACACTCC TCGGAGTCA ATGTCACCG CAACTACCTA GACTGGCTCA CGTCCATCCC TTGGGGCAAG  
TACAGCAACG AGAACCTGGA CCTNGCGCG GCACAGGCAG TGCTGGAGGA AGACCACTAC GGCATNGAGG ACGTCAAGAA  
ACGCATCTG GAGTTCAATTG CCGTTAGCCA GCTCCGCGGC TCCACCCAGG GCAAGATCCT CTGCTTCTAT GGGCCCCCT  
GGCGTGGTA AGACCAGCAT TGCTCTGGTC C

SEQ ID NO:2174: (Length of Sequence = 308 Nucleotides)

TCATTAAATA GCTTCTATGC CACTCTGA TTAAGCCGAC TGAGGTCCCT GGGATCTGGG TCACTGGACC GAGCTGCTCG  
CTCGGTGGCT CCACTGCCAG GTCCGGGCGC GTCCTCCACA GCGCTCAGTT CTGGCCAGA CAGGGCTGA CATCCGCCG  
CTGCACTCC GGGGTGGCG TCACCGTTC ACGGCCAGG ACTCTNCTG CTGTCGGG AAGGGATGT CGAAGATCTC  
CCGGTAGTNT TCCACGAAG TAACCTCCAG GGCCTCGST GATGAAGGCT TCCAGGTCT AGAAGTCC

SEQ ID NO:2175: (Length of Sequence = 403 Nucleotides)

CTGCCCCAAG GGCCTGAGCT GGTGGAGGCA GAGCAGGAGT TGGATCCAGG CCTGTNTGAG GCATCTGCC ACCTCCATCC  
AGACCTGGAG CAATCCCTGA GAAGGTGGC TACCACCAGA GATGTGGCAG CTCTGGTCTC AGGAAGCATA GCCGGAGGAT  
GTCCAGGCA ACCAAACAGC CATTATCAG TAAGGAGCCA GAGTNAAGGC TGCTAGTTCA GCCCCGGAA GGTGTCCAG  
GGCAGCCAG TNCAGAACTC AGCAGGAGCT CAGTTCAC TGAAGCTGAT TCACTCCAG TGTCCACAAG GGACATCTG

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ACCTGGAGGT CCTCGGCTAC TCACCCTGGG GCTTNCCTGC ACAGCCCAGG AGCTAGCCCA GGGCTGCCTC TAAATGGTTC  
CCG

SEQ ID NO:2176: (Length of Sequence = 399 Nucleotides)

AGGCAACTAT TGAGGGAAGA GGCAGAAAAA GGAAAAAGGA ATGTACGTAA GGCAATTTIN CTTAAAAGTA CAATAAGCTT  
AATAGTGTTC TAGGAAGACA AGATAAAAAT TACTCAAGGC TAGCTTGGTT CTCACTGAAT AAAAACAAAG GACTAAATAC  
TGAGCTCCTT CTGTGTGGAT CTAATAATCA ATGCCTTGGT CGCTATATTG GTAATCTCTG GGGTAGTCAT CCTGGTACTC  
GCCATGATAC TCATCAGGGT ATTCTGCCTG ATAATCACTA TCACTGATTT CCGAACCATT TGTTCCTGTT CCTTGGCTTC  
CGTTGTGAAT GACAGGTTCT GTAGGAGCAG CACAGTATTT GGGGATCATA TACTTGCCGN CCAAGGCCAT ACAAACTCA

SEQ ID NO:2177: (Length of Sequence = 302 Nucleotides)

GGTTTTTATA AAAATCAGAA TTTTTCAAAT GCATTGGTCA TTTTCAGATG CATTGGTCCAC ATTTCAATTAT TCCATATCAA  
AAAACCTGCAT TTGTTAATGT CACACAAATC TCATTGGAAA GGTCTTCAAG TATTGTGAAG TTGTCCAGGT CACAAAGATG  
AATGCTAGTT TTTCAAAATT CTACTTTTFA CTGGAATGCT CAAATCTTAT AATTGGTAAAC CCGGTCAGTT TTCTTTTAGT  
TGATAGGCTT ACTGCTTTTA TGTGTGAGA ATACTTGTCT GTGAAACATC CAAATCTGGA AG

SEQ ID NO:2178: (Length of Sequence = 343 Nucleotides)

GGTTTCACTC TCCTTGCCCA GGCTGGAGGA GCAATGTTCAT GATCTTGGCT CACTGCAACC TTCTCCCTTC CAGGCTCAAT  
CAATTCTCCT GCCTCAGCCT CCCGAGCAGC TGGGACTACA GGTGCGTGCC ACCATGCGCA NTAGGTTTTT TTTTGTAGA  
GACAGGGTTT TGCCATGTTG CCCAGGTTGG TCTCCAATC CTGAGCTCAA GTNATCTGCC TGANGTGCTG GGATTATAGG  
TGTNAGCCAC CACATCCAGC CTCCTTTTAA TGTTTTGTG ATTATTTATA GTGAAAGATT TAAATTCCIT TCTATTCTCT  
TGTGGTATAT ATTCTATAGG CTA

SEQ ID NO:2179: (Length of Sequence = 377 Nucleotides)

AGATCATCAG GAATTAGATT CTCATAAGGA ACACACAACC TAGACCCCTC AGAGGTGCAG TTCACAGTAG GGTTCATGCT  
CCTATGAGAA CCTAATGTTG CAGCTGATCT GACAGGAGGC AGAGCTCAGC TGGTAATGCT CACTCACCTG CTGCTCACCT  
CTTCTGTGT AGCTCGGCTC CTAATAGACC TGTATGTGTC CATGGTCTGC GAGTTGGGGA CCCCTGCAGG AAGTCTTGTA  
AATGCATGTC AGGAACTTA CTGTTTACAG CCACATAGTT TGTAGTAGTA AGGAACTAG GACAATCAA ATATTATCA  
NGGGGAAAC TGGGATAAAT TGTGGGTCAA TTTCATATGT TTCATACAGG AAAAAAG

SEQ ID NO:2180: (Length of Sequence = 195 Nucleotides)

GATATTTGCT TTTCTCAGAA CCATAATCGA TACAAGATGC AGTGACCAAT TCATTCTTA AAACACCTGG GCTCCTTAAG  
CGGCTAGAAG ACACAAGTTA CATCCAGCCC ATCAGGGAGC CAGAGGGNGA GGGGTCCCA GCCAAGCTCT GGNACGGCCT  
GCCATGGGGC AGNGCCTGAC CGTNCAGCCA GAGGT

SEQ ID NO:2181: (Length of Sequence = 244 Nucleotides)

TTGGGTGGGA ACGGGCCCGG AGCGGGAGGA ACGTGACTCC CCAGAGGGAA GATGGGCATC ATACTGGGCC CAGAGCTGGG  
AAGGAGTTGC TGCCAGCACA GGGTGGGCCT GGAATCCCTT CGCCCCIACC CCCAGTGGTT GTGGCTGTAG CCCTAAGCCT  
GGAGAGCAGG ACCGCGCCCGG GGTGTTNINEN AGGCTGCCAG GTGCCTCCCA GAGCTCCCAA GGGCCCCAC CTGCAAGTNC  
CAGC

SEQ ID NO:2182: (Length of Sequence = 287 Nucleotides)

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CTCCTTGAGT CTGTTGACAC GTCACATGGT CAAAGTCTCC TCATTTCAGC CAGTCTCAAC ACAAACACC CAACAGGGAT  
GCACTCAACT TGTGTTTCC ATGTGGAAGT AGGTGGCAGG GCGAGAGGGA AAGTAGTAGA AGGGGGCTAT GGTGTGTCG  
CAATCAGTCC CCTCACATAA AGCCACATGG ATCTAGGGGG GTATCCAAGA GCTCTGGTGG GGTCCGTGTT GCACCTAAGA  
CATTATAGGT CAGAGCAAGT TGCTCAGAGG GTTCCAGGCA GGGGGCT

SEQ ID NO:2183: (Length of Sequence = 389 Nucleotides)

GATCCAGAGA GGGCTCCAGG TGGAGTCCCT TTTTCTGCAT AAGGGGCTGT GACCGAAGCA CAGAGGGGAA AAAAAAAGT  
GGTGGGAGCC TCTCTGGTTC TCACCTGAAG AGGGAGGTGG AAGGGCCTGA AAATTAGATT TTNTTTATAA ATAATAGATA  
TTATAGGTAT ATTTCATAT TTTTACATAA TGATGCCAAC CACAAACAAT GGACCATAAA GCACTGACCT CAGAATGATC  
AATTGCAAAA TGTTTAAACC CTGGGAAGCT TTGCTTAGG AGGGCGGATA TTCTGTGTG ATGTTATTCT ATAGCCATAA  
ACTTCCCTGA ATTTCCTGCT AATGTATCCA AGTCCAGGGA AGTCACTTAA AACTCTTCAA ATGCAGCTT

SEQ ID NO:2184: (Length of Sequence = 383 Nucleotides)

GCAAGAGAAG CGGTTTGGGT CTCTGAAGGA AAGGCCAAAA CCCAGAACAA AGAAGAATCC TATGACTTCT CCAAATCCTA  
TGAATATAAG TCAAACCCCT CTGCCGTGC TGGTAATGAA ACTCCTGGGG CATCTACCAA AGTTATCCT CCTCCTGTG  
CAGCAAAACC TACCTTTGGG CGGTCTATAC TGAAGCCCTC CACTCCCATC CCTCCTCAAG AGGGTGAGGA GGTGGGAGAG  
AGCAGTGAGG AGCAAGATAA TGCTCCCAA TCAATCCTGG GGCAAAGTCA AAATATTGA GGAAGATGN TCCACAAGGC  
CAGGTTACAG AGGAATGCAA GGAGCTTCCA GGAAGCACA GAATTCCAAG TTTTCGGAAA TTT

SEQ ID NO:2185: (Length of Sequence = 359 Nucleotides)

CTTTAATTCA CATCAGCA GTCAAGGAAG TGGGAAAGG GGAAAAAAT CAAGTGGCAG ATATTTACAT CTAAAATTCA  
CATTACTTGT TGGATTGTGA ACATGCTACC ACAATATATA CAGTAAATA CCTCTGGGA CAATGGTACA AATTTTGT  
CCTTTAATT TGCTTTCTG GTACAGGTAA GATCATTTT AAATCACTTT TTTCCTTAA ACATGAATAC ACAAAGAAA  
TGGTTAGAAG TTTCTTGT TTAATAAGC ACAGAATGCG GGAGGTTAAA AACACATTGA TAGTGCTGAA TACCAATTGG  
NCATCACT CTATACATTT TTTGCTCAA TTCTGTAC

SEQ ID NO:2186: (Length of Sequence = 337 Nucleotides)

ATAGTTATAC TCAGTGAAAT TAACAAGACC CAAAGGTGGT ATTGTCTAGG AATAAAGGG ATAATTTTGG TTGTTACAA  
AAGTAACTTG TCTAGACCA CACATCAGAA AAACACAAA ATAGCAGACT CTAGTTCTAA ACAGCTATGT CTAAATAGA  
TTATATAGTA AAACCGGTAT TATACAGCAT ATTGTGGATT TGATAACAG ATAAATATTT GCNCTGAGTA GGTGTTTAT  
AATATAACAT TTNTTATCT ATACAGAATG AAAGCCAAA AGTTAACTGT ATAGAGATGT GCAGAACAC ATTAATATT  
ATGGCTCAA AGCAGG

SEQ ID NO:2187: (Length of Sequence = 329 Nucleotides)

GCATTNTICA GCACAGATAG AGCCCTGTCC CTCCACCTAG TGCCACTCC ATGACTGTTA ATAATAACAA TAATAATAAA  
ACTACTGGCC AAGCAGGTG GCTCATGCT GTAAATCCAT CACTTTGGGA GGTGAGGTG GGCAGATCAC CTGGCCCAAC  
GCCACGCT CTAGCTCGG GCTCCCTGAG GTCCCACTG CCTTNNCCG TCCCACGGCT CCCACGNTG CACCTGTCC  
TGACTCGCCA CTTGTTCTG TGGGCAGACT GCTGATCGAG TTCACCTCAC CCATGCCCTT GGAGGCGGT GCAGAGGGAG  
AAGCCAGG

SEQ ID NO:2188: (Length of Sequence = 335 Nucleotides)

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GGCCCCAGCT CCTCTTCCTG CCTCTNINAT GGCTTGGGCT GGAGTGGGCT CTCTGGACCT GACCGGGGGT CAGACTGTGG  
 GTCCCTGCGT CTCCTGCCCA CTCNACCGG GCTTCTCTCC TCACGCTTA GGGTCTGTCC CGGGTACTCA GTCAGCCCCAG  
 TGGGATCTTA CCCACTTCCC TGCAAGGTGC AACTGCCCA GGCTCAGGCT GCCCAGCGGC TCTTCTGTGA CAGTAAGAGC  
 AGGSCITGGGC GCTCTTTTCC TGGCCCCGAA GCGCAGGGG CCCCTCTCC AGAGCCTINGG CGCAAGGAAC ACAAGGCTGC  
 CGCTGCTCTT CCAGG

SEQ ID NO:2189: (Length of Sequence = 366 Nucleotides)

AACTGGTGGG TCAGATCGAN TTCTACTTTT CTNATGAAAA CCTGGAGAAG GACGCCTTTT TGCTAAAACA CGTGAGGAGG  
 AACAGCTGG GATATGTGAG CNITAGCTA CTCACATCCT TCAAAAAGGT GAAACATCTT ACACGGGACT GGAGAACCAC  
 AGCACATGCT TTGAAGTATT CAGTGGTCCT TGAGTTGAAT GAGGACCACC GGAAGGTGAG GGAGGACCAC CCCCGTCCCA  
 CTGTTCCCCA ACGAGAACCT CCCAGCAAG ATGCTCCTGG TCTATGATCT CTACTTGTCT CCTAAGCTGT GGGCTCTGGC  
 CACCCCCAG AAGGAATGGA AGGGTGCAAG AGAAGGTGAT GGAACA

SEQ ID NO:2190: (Length of Sequence = 333 Nucleotides)

CTGCGATCCA GCCTAGGCAA CAGAGTTGAG ACCCTATCTC AAAACAAACA AAACAGCCAG GCACGGTGGC TCATGCCTGT  
 AATCCAGCA CTTTGGGAGG TCGAGGTGGG GGGATCACCT GAGGTCCGGA GTTCGAGACC AGACTGACCA ACATGGAGAA  
 AGCCCATCTC TACTAAAAAT ACAATATTAG GGGGCGTGGT GGTGCATGCC TGTAAATCCCA GCTATTITGG AGGCTGAGGC  
 AGGAGAATCG CTTGAACCTG GGAGGCGGAG GTTGCACTGA GCCATGATTG AGCCATTGCA CTACAGCCTG GGCAAGAGCA  
 AAATCCGTC TTC

SEQ ID NO:2191: (Length of Sequence = 284 Nucleotides)

AAGTTTATAA AAGTTTGATT ACTGGAAG TCGATCTAA TTCAGAAATT TCAGGCCAAA TGAAACAGCC CTTCAAGCA  
 AACATGCCIT CAATCTCTCG AGGCAGGACA ATGATTCATA TTCCAGNGT TCGAAATAGC TCCTCAAGTA CAAGTCTGT  
 TTCTAAAAAA GGCCACCCC TTAAGACTCC AGCCTCCAAA AGCCTTAGTG AAGGTCAAAC AGCCACCANT TCTCCTAGAG  
 GAGCCAAGCC ATCTGTGAAA TCAGAAATTA GCCCTGTGTC CAGG

SEQ ID NO:2192: (Length of Sequence = 260 Nucleotides)

ATGACGACGG CTACCTCGAG GTCATTGGCT TCACCATGAC GINGTGGCC GCGCTGCAGG TGGGCGGACA CGGCGAGCGG  
 CTGACGCACT GTCGCGAGGT GGTGCTCACC ACATCCAAGG CCATCCCGGT GCAGGTGGAT GGCGAGCCCT GCAAGCTTTC  
 AGCCTCAGGC ATCCGCATCG CCTGCGCAA CCAGGNCACC ATGGTGAGA AGGCCAAGNG GCGGAGCGCC NTCCCCCTTG  
 CACAGCGACC AGCAGCCGGT

SEQ ID NO:2193: (Length of Sequence = 247 Nucleotides)

GGTCTCAGCA CTGCTGGGT GACCGCGGG AGCAGGCAA GGAGGGCTCC CAAGTCCGTT CTGCAGCACT GGGGCAGGGA  
 ACAGACCCAG GNTCTGGGA ATCTCTTCT GCTAGCTTT GCTGCTGTC CAGAGCAGG CCTGCGGTTT GGGTCTGTIN  
 ACCNTCCGGG GGCGGGGGA GGGCAAGNA GCGGATCTC TGAAGTCCG CCCAACTTCG CTNCTGATCC CCCAAGGTCA  
 GAGAGGG

SEQ ID NO:2194: (Length of Sequence = 399 Nucleotides)

CTTCCATCTC CGGGTTCAA GCGATTCTCG TACCTCAGCC TCACAAGTAG CTGGGATTAT AGGTGTCCGC CACCACCT  
 AGCTAATTTT TGCAATTGTA GCAGAGATGA GGTTCGCCA GGTGGCCAG GCTGGTCTTG AACTCCTGAC CTCAAGTGAT  
 CCACCCACCT TTGTTGGCCT CCCAAGTGC TGAATTACA GGCAACATGT AGCCTTTGAG TCTAGCTTCT TCCACTAGCC

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TAATTCATTT GAGATTCCAC TCGATTCTAC TTGAGATTCA TCCACATTGT TGAATGCACA TTCTTTTTTA TTTGTTCTGT  
AGCATTCTGT TGTGCAGCTG TGCCCCAGTT TGTTTANCTA TTCACTCTCA GTTGTTTCCA GTTTTAATGA CAACTTCAG

SEQ ID NO:2195: (Length of Sequence = 172 Nucleotides)

TCAAAGTCAG CTTCTTGACC TGCAGGGCTT CAATTGTGG CTGACAGTTT TAACTCAGAA AATCCCTGAC TTGATTGGCT  
ACATAAATNA TATGTAATAT AGCCATTAAG ATCATGGTTT TGGAAAGTAT TTTAATGATA CAGGAATGTG CTCTGAAATA  
ATAAGTGGGA CT

SEQ ID NO:2196: (Length of Sequence = 398 Nucleotides)

GCAAAAAAA AAATTATTAT CTCCACTTTA CCACTGCTGA CACTTCACCA ATGTAGGGCT CTCAGTGACT AGCCAGGGT  
CATGCACAGC CTGTTTCAGC AGCTACCTTG GACTTGAACC CAGCTCGGTC TGTCTGACTC AATGCCTATA GTCTTAACCT  
TTCCAGCAGC TGCTTCTTTG TCAAACAGGT CCTCCCGCAG GTTTTCACAG CCCAGCCCCCT TACTCAACAA GTATTTATGG  
ACAGGCCTCA GGAACACTAG GCAAGTAGGA TAGCAATGAA CAAGATGCTG ACCITGACCT TGACCCCTGCA TCCATAGTAT  
GAGCATTTTA ACTGGGGGAG GGTTTGCAA GTTCTCTTAA ACAGTCTACT ACATGCTCTG TAAGCATTTT CTTATGGG

SEQ ID NO:2197: (Length of Sequence = 313 Nucleotides)

GTCCCTTG TG CATTGAGTGC ATCCCCGCTG GTGACTAAGC TCGCAGCAAG CGGCTACCCC CCGATCTGCA AAAGGGCTC  
TCCCTTTG TG TTCTATACAT TGTGAATCTT CCGTCTGAA GAACGCCAG CCTGCCAGA CAAAGCCCCG CCTTNCCTAA  
AGCAGAGGGG CTGTCTGTGT CTCCAGAAAG GGGACATCGG GGGGAGGGG GGCTCAGAAA GGAGAAGGGC TGTGATCTCC  
GGTCCCTTCC CCCATCATCC TTCCTTAGAC TGATGCTTTG ACTGAATCAT CACTAGCTAT GGGCATTAAA AGG

SEQ ID NO:2198: (Length of Sequence = 360 Nucleotides)

GGTCTCACTA TGTGCCCAG GCTGGTCTCA AACTCCTGTT CTCAGCGAT CCTCCTGCCT CGGCTACCA AGGTGCTGAG  
GTTACAGGCG TGAGCACTGC ACCTGGCTAG GAACTNAGT TTTTTCAGTG GTAGAGGCTC CTAGCCAGTG GCCAAGGGAA  
AGAGAGAGTT CTGGGTTGAG GGGCTGGCAG GAAGTCAGCA AGACACCAGG GACTCGGCTC CACTGGCTGG ATCTCAGGGA  
AGAGCAACTG CCACAGTGGG GACCTGGAAC ACAAAGGGAA ACTGAGGCAG CAGCTGCACC ACAGTTTACA AGTAGAAGA  
CCATGCTTGA GGACAACAGA AGTTTCACTA AGGATGCACG

SEQ ID NO:2199: (Length of Sequence = 374 Nucleotides)

TTTTGGGTAG TACCCITGCC CTTTTCATGG CCACITCAAA GTGAAGCCAG CAAAGTGATA ATACTTTATC ATTAGTATT  
ATCATAAAGT ATTAATACTT TGTATAAAG TCCTCCTTGA GCCAGGGAC CATGGAAGTC AGCTAGAAGA GCCCTGAGCA  
AGGAGCAAGG ACTTGGGCTT CTCCAGCTT TGCTCCTGGC TTGTTTGACC TTGACTCATT CCCCATATGT CTTTGAGGAG  
GCTCACAAA TACTAAAGCT GGGAGGAAAC TTGAGATCT ATAGGTCAAA CCTCCCAAT GGGCTGATGA GAAAATACAC  
GCAGGCCTAG CATGGTGCTT GCCACCATGG TGGGATCCAG TATGGTTTTA TAAA

SEQ ID NO:2200: (Length of Sequence = 416 Nucleotides)

CTACTAAAA TACAAAAATT AGCCAGGCGT GGTGGTGGC ACCTGAAATC CCTACTCAGG AGGCTGAGGC AGAGAATCGC  
TTGAACCTGG GAGGCAGAGG TTGCACTGAG CCGAGATCGT GCCACTGCAC TTCAGCCTGG GTGACAGAGC GAGACTCCAT  
CTCAAAACAA AACAAGCAA CAAACAACAA CAACAAAAA TACCTCTTGA CTTCTAAAGA CGCAAAAGTG GCCAAAAGTG  
CAATACAGTA TTGTGTTTAT TTACATCTAT TTTAAATGCA TGTGTATCTG TAAATNCAA GTGATTCGTG ACTCATTGTC



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TCCTCAGTCT ATAGCAATTAT TAACTTTCTA GGAGCAGCAG TGGAGTAGAG TGGTACTGAA TTGGTCACAG ACTTCATCCG  
ATTATCAGGA TCCTGG

SEQ ID NO:2201: (Length of Sequence = 315 Nucleotides)

GAAACCAATA TAAATTTCAA AATAAACCAG CATACAGACC AATTGCAATT TATAGAAAAA ATAAAAATGT AGAAACATCA  
CCTCCTCTCC CCGACCCCGAG TACTGAAATT ATACTTCCTC AGACATACTG CCCCATCACT GGGGAGGGTG CGGACAGATT  
GGGTACATTT ATAGANTATT AAATAATTAA GTAACAGAGG CACCGTTTTT GCATGTATGG TCCCAAAGAC TTTTCAACTT  
NTTTTCAAC ATTACAGTTG TTAAGAATGG AAATTGAAGG AATTGTACAT ATTTTCACTG GCAGTTTCTT ACAGA

SEQ ID NO:2202: (Length of Sequence = 328 Nucleotides)

GCTCTGTCAC TCAGCCTGGA GTGCAGTGGT GTGATCTCGG CTCACTGCAA CCTCTGTGTC GCAGGTTCAA GCAATTCTCA  
TGCCTCAGGC TCCTGAGTAG CTGGGATTAC AAGCATGCGC CACCATGCCC AGCTAATTTT TGTATTTTAA GTAGATACAG  
GGTTTGCCT TCCTGACCTC AAGCTATCCA CTCGTCTTGG TCTCTCTCAG TTCTGGGATT ACAGGTATGA GCCACCATGC  
CTGGCCGGAA TATATATATT TTTTACCACT CTATTTCCAG TGCCTAGACT AAAACCCAGC ACATGGTACA CGTCATACAT  
AAGGAAGG

SEQ ID NO:2203: (Length of Sequence = 268 Nucleotides)

ATTTTGTGCT CGTCGCTCAT GCCACCACTG GGACCNACGG GGT CGGG AGTGGTTTTT CTGGCTTGTT TCAGCCTTTT  
CAGGCTCTCT TCATCTTCT TCACAGAGTT TAATACATCT GACACGGTTT CATAGTACTT ATGAGTGCCT TCACTGAGAG  
TGCCCTCTAG CCACTGCTGA ATTATGCTT GTTTGAGCTT ATCCTTGCTT CCGCTCTGAA GCTGGAATAA GGGCTTCANA  
GCACTGTCCA CATAGGAGGA AGCTTTGG

SEQ ID NO:2204: (Length of Sequence = 353 Nucleotides)

GTAAATCINA GGTCAAGGAT GTCCCATGAT GGATGATGAC TGANATGGAC GGAAGTTTGG TTTGAAGCGG TGGCATTGGT  
GCAGGCTGSC AGAGGGGGCA GTTCTGGATA GAGTGCTCTG ATGAATGGGG ATACTCATGG GAGGTGATGC AGATGAGGAT  
TCINTGCTTC TNAAGGAGGA GCCAGGCATT TAGAATGGCA CTGGAGAGCA AGGACTGACT GANCCCCCTC ACTGTGTCCC  
CAAGAGGCCA GGAAGGGAAG ATTGGAGGAG ACAAAGTTGA AGTGAGTTTT CCAGGGAACG AGTCAGTTAA GAGATGGTAG  
GATCTTAAGG GAAGATGGCT AAGATCTTAA GGG

SEQ ID NO:2205: (Length of Sequence = 265 Nucleotides)

GTTTCACCAT GTTGCCAGG CTGGTCTCAA ATTTCINACC TCAGGTGATC CACCCCTCCT CAGCCTCCCA AAGTGTGGG  
ACTACAGGCG TGAGTCACTG CGCCAGCCG TGGTTTTTTT TTTTLAGAAA CAGTGTTTTG CCATGCTGCC CAGGCTGGTC  
TCAAATCCAT AGGTCAAGT GATCTCCCA CCTCAGCTC CCAAAGTGTG GGGACCACAG GCATGAGCCA CCATGCTTGG  
CCAGAAAGAA GTTGTAAACA AAATG

SEQ ID NO:2206: (Length of Sequence = 340 Nucleotides)

GCAAAGCTTA TTTTTCAGT TGTGGGCTCT AGTTTGGTTG GGAAACTTAT TCCTTAGACC TGGGTCACCC CTGGGCTCC  
CTTAATCTCC CGCCATATGT TCCTCAGAAT CAGGGCATGG TGTCTGCCC TGGTGCGACT CAGCCCGGTT GCTTGCACA  
GACTCTGGGC CAGGSCAGGA TGTGGTGTG TCGCGGTGT TCGCGGGTG TTATCTGTGG CGCTCAGTAT GGTGCATAGT  
GTAGACAGCT GCCCTAGGTG GTGTTTAATT GATCTGGGTA AGACTCAGNC AAGGCAGGGC ACAGTGGCTC ACGTCTATAA  
TCCAGCACT TTGGGAGGCT

SEQ ID NO:2207: (Length of Sequence = 348 Nucleotides)

GTGTTTGTTC CTCTTTCCAC CATAATTGTA AGCTTCCTAA GGCCTCCCCA GCCCTGTGGA ATTGTGGATC AATTAAACCT  
CTGTCCCTTTA TAAATAACCC AGTCTGAGGC AGTTCTTTAT AGCAGCGTGA GAATGGACTA ATACACCTCC CTTCTTGAGT  
CTGGAAGAAT ATGTGAAGGG AGATTGCTAA GGACTTATTT ACAGAATGGT TCTTAAAGTG CTTGGGCAAG AACTATGTAT  
TTNCGGAGGC TGGTAGTGTT TCAGTGAATC TGAAAACCTT TGTGACATGT GAGAAAGGTA TGCTGTCTCT GAAAGCTAAG  
TGTATTATGA AGGATCTATA AAGGGCCA

SEQ ID NO:2208: (Length of Sequence = 154 Nucleotides)

GAATCCTGCT GTGCACATTG CTTGAGATGG CTAATTATAT CTTTGGACTG TTTGTACAAC CATTGACAAA TATACTTACT  
TTCAATTTCTG CTAATGCAAC TGAAAAGAGC ATTCTGTAA TTGAAGAAAA ACAAATAAAC AGNAATTAAC AACC

SEQ ID NO:2209: (Length of Sequence = 352 Nucleotides)

GAGGTTGAGA ATCCTCCATC CAGCATCTTC CCTGGTCACA TGGTCCCAAC CTTTGTCTCC ACCCCCTTCT CTGTTCCCCC  
CGCAGTCCAT GCTCCAGCCA TCCTGACTCT GTCCCTGGAT TTCTGGCTTA CTGACACCTG AGCCTGTGCA CAGGNCCTCC  
CTTCTGTATA GAGCAGCCTT CCCATCTTGT GGACTTGTCT CCCATCTTGT GGACTCGGAG GGTTCGAGC AGCGTTGAG  
GTGANGCTCC TATGACACCT CCNCCGTGAA GGCCTNCTCA CTTTTCATT ACCAGTGAGG CCTGCCACAG CCGATTGTGT  
ACTCTGATCC TGGCAGCAT GGAAGCCATC TT

SEQ ID NO:2210: (Length of Sequence = 338 Nucleotides)

GTCTTTCCAT CAAGAGTCAA TGTATATGCA AATATAGACT TAAGAACATA AGCATCCTGG TTTAATGTTG TTGTGAGCCC  
TGTGGAAATA AAATTAACT CAGTGAATGT TTACAAATCA ATACATAGTA ATCCTATATA TGAAGCTAA GATGTATAAG  
ATGTTTATAA ATTINCTATT AGAAAATACT GCTTTCTTAA AGGTGATTTT AAAAGCTAG CTGATATCTG ATGGCTCAAG  
CATCCAGAAA ATGTATGCAA TGATAAGNCA TTGACTAGGA TGAACAGAAA AGGGATACAG GAAAAGTCCG AACACATGAA  
ATTCTAAATT AACCAAGA

SEQ ID NO:2211: (Length of Sequence = 353 Nucleotides)

GTCTCTGGAG TACCTCTTC CCCCACCCC AGACCTGCTT TCAGAGCAAA ACTCAAGTCC CTCTTCTTCC GTGAAGCTTC  
TCCCTCAGCT GAGCAGTGAT CACTTACTCA CTCTTAACCC CAATCCGCTG ACTGGGTGGG GACAGCACGT CCAGCCTTCC  
CACCTCTCCT GCAGGCTTCT AGACGGAGTT TCAAAAACCTG ATGAGCCTCG ATCCAGGGCT TGAAGAAGC CAGGGTGTA  
TCTGTTCAT GCATGCTTCC CCAGAGNCTC GCCCAGTGCC TGGNACATAG TAGGCACTCA ATAAATGCTG AATGGGTGAA  
TAGTTGAATG ATAGGTGCTC AATAAATGAA TGA

SEQ ID NO:2212: (Length of Sequence = 293 Nucleotides)

GAGAAAGGAG GCAATCTCAG TCTCGTCTC CAAAAGGGA TACTACTAGG GAAAGCAGAA GATCTGAATC ACTGTCCCCA  
AGAAGAGAAA CTTCTAGAGA GAACAAAGA TCTCAGCCAA GAGTGAAAGA TTCTTCCCCA GGAGAAAAAT CCAGGTCCCA  
GAGCAGAGAA CGAGAAAGTG ATAGAGATGG GCAGAGGAGA GAGAGAGAAA GGAGANCCAG AAAGTGGTCT AGGTCCAGAT  
CTCATTCTAG GTCCCCCTCA AGATGTAGAC CAAAAGTAA GAGTTCATCA TTT

SEQ ID NO:2213: (Length of Sequence = 423 Nucleotides)

NATTAACACC ACAGTGATAA ACAACTTTAA GCTTATGTTT CTTTATAGAT CACTGGCTCA CACATAATTC AAAACCCACA  
CAGAAGCTAA GAGTCTTTAC ATTAAATATA TTCTTCTTAA AAATCCTTAC TGTATGCATC TGTCTCAAG CAGTAAAT  
TGATTATGCA CCATTTTATA ATTAATATGT CACATTTACA TAGCAAAATA ATGAAGGCAC AGCTAATACA AGCAAACTTA

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AACCCCTTCT ACTTCTGAGC TGGGGGTAGG GGCACACACT TGGGATTGGT TCTTCAAGTA TATATTTTIN CCAACATTA  
GCTTCAGTGA AGAGTTCTGG ATGATTTTCA CAGCTACACC CCTAAAAGCT ACATGGACAG AAGACGTCA CAAGGCGCAA  
GGTACATAAC GGTGGGTACA TAT

SEQ ID NO:2214: (Length of Sequence = 259 Nucleotides)

GTCATGGAGA TCCACAGCAA GTACTNGCGC TGCTGACAGG ANCAACCTCC ACAGCGGGGC GTTCTCTGAT CGAGGCTCAG  
ACTTTGAGGA ACGAAGAAGC CGAGACGGTC ACCGCCATGG CCTCGCTNTC CGTGGGGGTTN AAGCCCGCCG AAAAGAGACC  
AGATGAGGAG CCCATGGAAG AGGAGCCGCC CTNTAGCAC TNCCTCGAAG NTGCTGTTCT CTGTCTGTG TGTCTCTGTG  
TTTAAGCTCA GCCAAGAAA

SEQ ID NO:2215: (Length of Sequence = 378 Nucleotides)

CACACATCCT CACCCACAG AACTGCTGG ACACACTGAA GAAACTGAAT AAAACAGATG AAGAAATAAG CAGTTAAAAA  
AATAAGTGGC CCCTCCAAAA CACGNCCTCA TCCACAGCG CTCGCGAGCT TCCACCACC GCCCGCTCA GTTCTTTGTC  
GTCGTGTGCC TCCCCAGCCC TGACGCGCCT GGCTGGCACT GTTGGCGCTG CATTCTGTG TTCAGTATG CCCTCTCTT  
GTTTGAANCA AAGAAAAATA ATGCATTGTG TTTTTTTTAA AAGAGGTATC TTAATACATN GTATCCTAAA AAGAGGAGCT  
CATGTGGCAA TTGGTGACA GCAGGAGGAA ATTTCTTGGG ACTTNTTTAG GNTGAATT

SEQ ID NO:2216: (Length of Sequence = 428 Nucleotides)

GAACCCACAC TGGGGAGAAA CCATATGAAT GTAAGGAATG TGGGAAAGCC TTCAATTATT CCAACTCATT TCAGATACAT  
GGAAGAACTC AACTGAGAGA GAAACCTTAT GTATGTAAGG AATGTGGGAA AGCCTTCACT CAGTACTCGG GCCTTAGTAT  
GCATGTACGA TCTCACAGTG GAGACAAGCC CTATGAATGT AAGGAATGTG GGAAATCCTT CCTTACATCC TCAAGCCTTA  
TTCAACATAT AAGAACTCAC ACTGGAGAGA AGCCTTTTGT ATGTGTGAA TGTGGGAAAG CCTTTGCAGT TTCTCAAAT  
CTTAGTGGGC ATTINAGGNA CTCACACTEN AGGAGGAAGG CCTCTGAAGT NTNAGATATG TGGGGNAAGT ATTTTGGGNN  
ATCCCCCAT GTCCTTAATA ATCCCCAT

SEQ ID NO:2217: (Length of Sequence = 408 Nucleotides)

GTCATCAGAG TTCATCGTGA ACACCCGTGA TGCGGCTCG GGGGCTTGT CTGTACCAT TGATGGCCCC TCCAAGGTGC  
AGCTGGACTG TGGGAGTNT CCTGAGGGCC ATGTGGTCAC TTATACTCCC ATGGCCCTG GCAACTACCT CATTGCCATC  
AAGTACGGTG GCCCCAGCA CATCGTGGGC AGCCCTTCA AGGCCAAGGT CACTGGTCCG AGGCTTTTCC GGAGGNCACA  
GCTTINACGN NACATCCAG GTTCTTTGTG GGAGACTNIN TACCAAGTCC TTCTTAAAG CCGGGGGCTT TCAGGTTACA  
AGNTTCCATT CCCCAAGTT TTTTCTCAA AATNNCCAGC AAAAGGTGGG TTGACTNGG GGGCCCTNGG GNTTTTCCCA  
GGGCTTTC

SEQ ID NO:2218: (Length of Sequence = 316 Nucleotides)

TTTACAGAAT ATAGCTTTAT TTATAGAATC TTACAAATAA AACATTIACA GTCCACATAA GTTAATTINC TTTTCTAATT  
TCTTCTCATA CACCTGAGTT ATTTAAAAAA ATACTGTGAT GGAAGTGCAG AACTGTAAAG GGAAATAAGA ACAATAAAAT  
CCTAACCTCT CTGCAAAAA TCAGACAACT TTGTTTTAAA GTAGATGCCC AGCATATTGC CATCTCTTTG GAAGAGGACT  
TACTATATC AGCTCTTACG NTACCCAAAC AGAGAAGCCT TCTTTTTAAA ACCCAAGGTT AAGGGCCCG TGAAGG

SEQ ID NO:2219: (Length of Sequence = 319 Nucleotides)

GGCTTCTGT CCCACAATT TCTCACGGTG GCGCTGGAC ACAGCAGCCA CCACAGTCCA GGCTGCGAG GCAGGGTGTG  
ACCTTGCCCG GGCAGCCACC CCTCCCTGAG AAGAAGCGGG CCTCGAGGG GGATCGTTCT TTGGGCTCAG TCTTCCCTC

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CTCCAGTGGC TTCTCCAGCC CGCACAGCGG GGAGCACCAT CAGTATCCCC TTCCCAAATN TCCTTCCCGA CTTTTCOAAG  
GCTTCAGAAG CGGCCTCACC TCTNGCCAGA TAGTCCAGGT GATAAACTTT GTGATCGTGA AATTTTGTTC AAGACACTT

SEQ ID NO:2220: (Length of Sequence = 343 Nucleotides)

CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGTAGCCCCA  
GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGCAGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC  
CAGCGTCCCC TCCAGTCTGC ACGGGGCAGT CCTCCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGCC AGGCAGCCCC  
CCTCTATCCC TCCCAGCACC TACTACATCG NCCTNCACAT CCTGATTCC TGTGTATTATG GGAAACTINT NCCAGAGATG  
GAGGTCTCT CGGAGTATCT CGG

SEQ ID NO:2221: (Length of Sequence = 373 Nucleotides)

CTCTGTCTCC CAGCCCGGAG TGCAGTAGCG CAATCTTAGC TCACTGCAGT TTTGACCTCC CAGGCTCAAA TAATCCTCCC  
GCCTCAGCCT CCTAAGTAGC CGAGACCACA GCTGTGCGCC ACGACATCTA GCCAATTATT TGTTTTTTGT AGAGATGAGG  
TCTCACTGTG TTGCTCAGGC TGGGTAGGTG TCTAACTCCT AGGCTCAAGT GATCCTCCCA CCCAGNCTC CCAAAGTGCT  
GGGACTACAG GCGTGAGTCA CCGCGCCTGG CTTTGTITTA GGCATTCTTT TTCCGCAGCA TCTGTTACCA GCAGCCTGAA  
GNCATTTCTA TAAACAATTA TCANGGAAGA CACATGGGNC AGAGACCCTA AAT

SEQ ID NO:2222: (Length of Sequence = 197 Nucleotides)

GTCTCCTGTA ATTCCCCCA ACCGTTCTT GAGGATGTGA AACCAACTTA TTGGGCTCAA TCCCATTTGG TCACAGGATA  
CTGTACGTAT CTNCCTTTCC AGAGATTGA TATCACCCAG ACACCGCCAG CATACTATAA CGTGTACCA GGTTCGCCCC  
AGTACACCAG CATATATACA CCCTTGGCCA GCCTTTC

SEQ ID NO:2223: (Length of Sequence = 280 Nucleotides)

TTTTTTTTTT GCATTTTTAG TAGAGACGGG GTTTCACGT GTTAGCCAGG ATGGTCTCAA TCTCCTGACC TGTGATCCA  
CCTGCCTCAG CCTCCCAAAG TGCTGGGATT ACAGGCATGA GCCACTGCGC CGGCCAACT TTTTGCATGT TTTCTTTAA  
ATTCTCTAC TTITAATTGT ACTTCTAATA CAGACACTTC TGAATCAGT TTTACATTG CTGCAGCCTT ACCAATTGT  
AGANACTGTT TATGTGATGT TTTGATTCTT CATTTATATA

SEQ ID NO:2224: (Length of Sequence = 388 Nucleotides)

GATTGCAGGC ATGAACCACT GCGCCAGTC GAGTGGTAAT ATTTTGAAAG GAAACCTTTT TCTGAGCAGG TCTCAAAGA  
GAGGTTAAAA TACTGAGTAG ACCATGCTGT AAACAGATGT GCTGTTATTC GGGCTTTGAT ATTCCATTTA TAAAGCACAG  
GCAGAGCTCA GAGTAGATTT AATGTAATC TGAAGGGCAC TAGGATTTTN AGAATGGTAA ATAAGCATTG GCTTCAACTT  
AAATTCAAAT CTGCATTGGC TTGTAATAAG AGACTAGCTT GTTACTGAAG CTTTNAAGCC AGTTGTTTTT TCCTATCTAG  
CTAGGAAAGT CCTAGATGGT ATCTACTTCC AATAAAGGC TGTCTGCCC AGGCGCGGTG GCTCACGC

SEQ ID NO:2225: (Length of Sequence = 420 Nucleotides)

GGTCGAGGAG CCTGGGCCGG GCCGGCGGG GACTACTCCG GAGTCAGGAG GCAGCAGNGG CGGAGGACGA GGATCTCTGG  
CAGTCAGCGC CGCTCGGACG CCGCCGGCAC CATGGGCTGC TGCACCGGAC GCTGCTCGCT CATCTGCCTC TGCGCGCTGC  
AGTTGGTCTC AGCATTAGAG AGGCAGATCT TTGACTTCTT TGGTTTCCAG TGGGCGCCTA TTCTTGGAAT TTTTCTACAC  
ATAATAGTTG TCATATTGGG TTTGTTTGGG ACCATTCACT ACAGACCTCG ATACATAATG GTGGACACCG ATCTAATGAC  
ATTCAATATC TCTGTACATC GGTGATGGTG GAGAGAACAT GGGGCCTGGT TGINTCAAGA AGAGTGCTGC CTTCCCTCAA  
GCCCCATGGC ANNGATGGAC

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SEQ ID NO:2226: (Length of Sequence = 264 Nucleotides)

GTACCTGCTC CCTGCCGGCA CCTTNTTGG TGGATATTTA GCTGCCCTCT ACAGTGGTTA TAACATTGAA CAGATCATGT  
 ACCTAGGCTC GGGTTTGINC TGTGTCGGTG CCTTGGCTGG CCTCTCCACC CAGGGAACAG CACGTCITGG CAATGCACTG  
 GGCATGATTG GGGTTGCTGG AGGACTGGCA GCCACCCCTG GAGTCTTAAA ACCGGGCCCCA GAATTACTAG CTCAGATGTC  
 TGGAGCGATG GCTTTGGGTG GTAC

SEQ ID NO:2227: (Length of Sequence = 402 Nucleotides)

AGAGGATTGG GGCACGCGG CAGGGGCGCT GGCACATTCC TCAGATTCTG GCATGTCATC CTGGAAGTAC TCAGCCTGGC  
 GGTACTGCCA CAGACGAGG TTCCCGTCCC ACGAAGTCTT GACAATCTTC TCTTCAAAGG GGIGCCAACT GACGTCACGC  
 ACACAGGCCCT TGTGGTTGGT CAGCTTCTTC ACAATGTGGC CACTTAGAAG GTCGTACACA ACCACTTTGC CAGTGGAGCA  
 GCCACTGTAG ATGAAGTCTT GCCAGTGTCT ATGAATGGGG GAGAACCGGC AGCGGATGAG GGTGTGCAGC ACTCCGTGGC  
 CCGGTAGGT CATCAAGGAG CTGTCCCCTG GGAGCTTCAG TTTCGGCCAG GCTTTTITNG GGCACITTTCT GCCACCGATA  
 GT

SEQ ID NO:2228: (Length of Sequence = 394 Nucleotides)

TTTAAAGTGG AAACAATGTT TTTAAGAGGT GATATAAAGA AATGCCCCCA CTGTAATCCC TACCATATGT TGATTCTATG  
 TGGTGGGAGG GAGGGGAGAA TGATTCCITT TTCTAGAATC AGAGAAITTG GAAAGTATCA AGAAAGATAA TAACAGAAAG  
 CATGAAATAG AGTTGTGCTT TGAAGATGAA TTGGATGAAA TTNTTATGTG AAGAGGAGTT TTCCAAAGTT GCAGACCCAG  
 GATTCTGTGC CAGAAGCATG AAAACGTTTC TTTCTTACTG TTTCTAGGAC CTAGGCAGCA TTTCTTCCAT GTCTGCAACA  
 ACATAAGAAA CAACAGCCCA AACAGCAGCA GCAACATTCA TCTGCTTTGG ATCCCATGGA CAGTCATGGT GTCT

SEQ ID NO:2229: (Length of Sequence = 342 Nucleotides)

TTTTTTTITAG GATGATTGAG TGTTTCTTTA AAAATAAAAA CCCACAAAAA AAGCCAGAAC ACCCTACCCA ACCCAGCCCA  
 GTGTAACAGG TTAGCCATTA ACACAGAATA AAGAAGGTCC CAGCCACACA CGTCATTACT CGGCAGAGGG TGTCCAGCCT  
 GGTCCGCCGA CGTCACAGTG GATGGCCCTG CGTGGCTGGG ACACAGACAG GGAGCAGGCA TGGCACCTGC GCCACGCAGA  
 GCAGCAAGSC TGAGCATGAC CACTGGAAAT AAATAAACAT GGTGCCGACA GCATCTTTGA ATTAGTAAGA CGTTAGCACA  
 AAACAAAAAA GCACAACGAC TG

SEQ ID NO:2230: (Length of Sequence = 357 Nucleotides)

GTGGAATGCA GCCATCACAC AGTAGTTTCT GAGATTGCTT CCGTCTAGGT TTTATGGGAA GATATTTCTT TTTCTACCAT  
 AGGCTTCAAG GCGCTCTAAT ATCCGCTTGG AAATACTACA AAAACAGTGT TTCAAACCTG CTCTATCAAA AGGAAGGATC  
 CACACTGTGA GTTGAATTCA CACATCACAA AGAAATCTCT GAGAATTCTT CTGTCTGGGT TTATAGGAAG AAATCCCGTT  
 TCCAACGAAG GCCTCAAAGC GGTCCATATA TCCACTTGCA GATCTACAG AAACAATGTT TCCAACCTGC TCTATCAAGA  
 GGAATGTTGC ACTCGGTGAG TTGAATGCAC ACATCAC

SEQ ID NO:2231: (Length of Sequence = 304 Nucleotides)

AAGAGACGAG GTCTCACTTT NINGGCCAGG TTGGTCTCAA ACCCTGGTC ACAACAATC CTCCAGCCTC ANCTCCCAA  
 AGTCTGGCA TTACAAGCAT GAGCCACCAT GCCAGCTTA AGGGGGATAT TTTTATAGAG CATCTTGCCC TGGTCTGGG  
 ATTCTCTGTA GATAATACAG TTAACAGATA TTCCCTAAG TGATTAAAGAA CCTTTCCATT TGACTGATTT INCAGAAAAG  
 TTTACCTATG TAACCTCAGT GGGTAGCACA ATGCTTGACA CATCTTTGNA GCTCAAATGT CTCT

SEQ ID NO:2232: (Length of Sequence = 354 Nucleotides)

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CCTGCCACTG AGGCAGGTGC GGGCCCAGGA CCATCACCAG GAATGCNAGG CCACCCTGGA CCAGAGGTAG GAGCCCAAGG  
 TCCGGCCCTT GCTCTTTGAT TGTGGGCAGC CTCTGCGCTT CTCTGGGTCT CAGTTGCCCC ATCTGCAGAG CGAGGAGGCC  
 CGGGCTGGT GGTCTTGAAG GGCCTTTTCC ATGCCGACAT CATGTCACTC TAGGCCTGGG GTTCAGTTTC CTGTGGCTGG  
 TGATGCTGTG GTTAAGTTTG CTTGACCCCA GCAGCCCGAG GGAAGTGTCTG AGTCACAGCA CAGCCCTAT TGCCTGGCTG  
 CTGGTGTGTG GGTCAATTTC CAGCAGATGA ATGT

SEQ ID NO:2233: (Length of Sequence = 414 Nucleotides)

CCCAAAGCCC GCACGATGCA GGCCACTNCG ATTCCACCAA GATGGACTGT GTGTGGAGCA ACTGGAAAAG TCAGGCTATT  
 GACCTGTGTG ATTGGCGGGA CATCAAGCAG ACGGGCATCG TGTITGGGAG TTTCTCTCTG CTGCTCTTCT CCGTGACCCA  
 GTTCAGCGTG GTGAGCGTGG TGGCCTACCT GGCCTGGGCC GCACCTCTAG CCACCATCAG TTTCGCGATC TACAAGTCTG  
 TTTTACAAGC AGTGCAGAAA ACCGACGAAG GCCACCTTTT CAAGGCCTAC TTGGAGCTTG AGATCANCCT TTCTCAGGAG  
 CAGATTGAGA AGTACACGGA CTTGCGTGCA GTTCTACGTG AACAGCACAC TTAAGGAAGT NAGGAGGCTC TTCTTGTCC  
 AGGACCTGGT GGAT

SEQ ID NO:2234: (Length of Sequence = 394 Nucleotides)

ATAATCCGAG TGCTCCATCT TCAGTGCCAT CTGGACTUCC ACCAAGTGCA ACACCCTNCA NTGTGCTTTT TGGACCAGCA  
 CCAACAGGAA TGTATCCCTC CGTGCCCTCC ACCGGACCAC CTCCAGGACC CCCAGCACCC TTTCTCTCTT CCGGACCATC  
 ATGTCCCCCA NCTGCTGGTC CTATCCAGC CCCAACTGTG CCGGGCCCTG GCGCCACAGG GCATATCCTA CACCAATAT  
 GGCCTTTNCA GAGCTACCCA GACCATATGG TGCACCCACA GATCCAGCTG CAGNTGNTCC TTTAGGTCCA TGGGGATCCA  
 TGTTTTNTGG ACCCTTGGGC GNCAGGAATN GGAGGSCAGT ATCCTACCCN GTAATATGGC NATATNCATN TNCA

SEQ ID NO:2235: (Length of Sequence = 376 Nucleotides)

CTGATATGAT GACAATAAAG GAGTATGCTG CTGCTGTTC GCTTTGCGTC CTGCTACAA ACGCCTGGTG GACAACATAT  
 TCCTGAAGA TCCAAAAGAT GGCCTTGTA AAAGTATAT GGAGAAATTG ACATTTTATG CAGTATCTGC TCCAGAGAAA  
 CTGGATCGAA TTGGTCTTA CCGGCGAGAA AGGTTGAGCA GGGATGTTGT CAGACATCGT TCTGGGTATG TTTTGATTGC  
 TATGGAGGCA CTGGACCAAC TTCTCATGGC TTGCCATTCT CAAAGCATTG AGCCATTTGT AGAAAGCTTT CTTCATATGG  
 TGGCAAAGCT GCTGGAATCG GGGGAACCAA AGCTTCAAGT TCTTGAACA AATTCT

SEQ ID NO:2236: (Length of Sequence = 399 Nucleotides)

TGGCAAGAAC ACTGAAACCC AGCCAACCTC TCCTCAGCTA GGGACCAAAA CCTTTTGTG TGTAGTCTTT CCGAGGTTGG  
 AGACTCTTCT GCAGCCAAGG AAAAGGTGCG GGAGACATGC GGAGACTCCG AGGTGGAGGA GGAGTCCCCA GGAAAGCGCC  
 TGGACGCAGG TCTACCAAC GGCTTTGGGG GTGCGAGGAG CGAGCAGGAG CCGGGCGGCG GCCTNNGGAG GAAGGCCACA  
 CCCCAGCAGC GCTGTGCTC CGAGTCCAGC ATCTCCTTCA GCAACAGCCC GCTCTGCGAC TCGAGCTTTA ATGCGCCCAA  
 ATNTGGGCGG GGGCAAACCG GCTCTTGTG GACGGCACAC GCTTGGAGGA CCNCAGTNAG CTGATCTTCT GCATCGAGA

SEQ ID NO:2237: (Length of Sequence = 234 Nucleotides)

AAANTACTAA CATTTTTAAT ACAGTCTGAT CAGATCAATT CACATCACAA GGTCAACCGG GGCTTGCTCA CATGTGNCAC  
 AACCTAGGTA CACAATGTCC CTACCTGCCG GCTGTCCAC CTTCCTGGTT CCCAACAGCA TTGAAACCCC CTACTTCCCT  
 GACCAGACTG GCATTTTTTA AAATTTTGCA TAAACTATT TCTTCCATAG NCTTCAAACA ATCAACTAGC CAAG

SEQ ID NO:2238: (Length of Sequence = 369 Nucleotides)

465

ATTTAAGGCT GTACTTAACT AATTGGGCT GAGGATGAAT ATATCAGCCA CAGCACATTA AAGAATGAGC CAAGGATTTG  
 TCATGGTGG TCACCTTTTA AAGTATTTGA TTAGTGCAAC TGGAGAATGA AAAGTGTATA TTGGTGACGC CAACCTCAGT  
 TTCTGAGCAC TCCTGCTCTG TGGTGAGAAT CAGACAAAAA TTCATCGGGG TGAAAAAAA AAGGCATTAC CTGATTACACA  
 CCGTTGTCTT GCTAGCCCTC TTCCATTCTT TTCTACACA GCACTTTGCT CTGTTAAATC CTCTCTCTGT CTCAGACCAT  
 TGCTTGCCCC TTCAAAGGGT ATGGTTCAGG CTCCTTTCAA GACATTTGG

SEQ ID NO:2239: (Length of Sequence = 399 Nucleotides)

TTAATATAAT ATTCAAGTCT AGCATTGCT ATTTACAACA AATAAATATT GCCCTCCCC AATCAGTAAA CAAACATTTT  
 TTTTTCCTT TTGCTTTTTA TACAAATATT CAATCACCCC ACCCCCACCC CAAATCCTCC TTCTCACTA ACCCCCGTCT  
 TGATGGTCT CGTAAAGCCC AGGACGCAGT GGTGAATGGC ACTTGCACTG GCATGAGATT CAACATOGAT GGGACTCAGC  
 TGGGACTGTC CTCCTCACC GGGTGCAGAG TCTGGTCCAT GAAGAGGGNT TCINTCTCTG CTCCCAGGGG AGGGCTGGGG  
 TAAGCGGTGG GTGAGACTCC CTCCTCTCA GTTGGNCTG ATGATGGAAT CTTINGTGCA GCCTGAGAAA GGCTAGAGT

SEQ ID NO:2240: (Length of Sequence = 388 Nucleotides)

TTTTCAGAAT TCATCTCTGA CTTTAATGGC TTAAGCAAGA ACAAGGTTTC CGTGGCTCCC CTGGGACTGA ATGCTGGAGG  
 ATATATACTT CACAGTCTGA GGCTGGTCC CAGGAACCTG AATCTAACAG GATGGCAAGT GGTTTTGAAA CATATAGATT  
 TTCAGGATGG AAGTTTGATT CTTGAGATG TGAATCATCC GTGGAAAATA AATGGTTTAG CACCTAAATC TGTATATTCC  
 CATCAGTGGC TTGGCTGACT CAGTTGTAAA TAGGGTACCC TCCATCTGTC TCCCACCCAT ATGCTCCACT GTCCCCAGGG  
 CCTCAGTGCC TGANCCCTAG GGGGATCGA GTTGGCTGCT GGATTCATTT CCGCAAGCA GGCTGCA

SEQ ID NO:2241: (Length of Sequence = 377 Nucleotides)

CTCCATTTTG TCCTAGTTAC TTTTAAGGTA TAAGCTGAAG TCATTGATTT GAGATGTTTC TNCCTTTCTA ATATAGGTGT  
 TTAATGGTAC ATATTTCTCC CTAAGTACTG CTTTAGTGGC ATCTGCAAA TTCTGACATA CTGTGGTTCA TTTTAATTCA  
 TTACAAAATA CTTCTTAATT TCCCTTTTGA TTTCTCTTT AATTCATGGG TTAGTTAGAA TTGTGTIATT TAATTINCAA  
 GTACTTGGCG ATTTATCTCT CTCTGTIATT CATGTCTAAT TTAATCCCAG TGTGGTCTGA GAATATATTT NGATATCAAT  
 AAAGCTACTC CAGCTACCTT TTGATTAATG TTATCACAGT ATATCTTTTT CTATCCT

SEQ ID NO:2242: (Length of Sequence = 381 Nucleotides)

CCCACATTAA CCAACACAC ACACACATGA CAACTCTAA GTCTCCAGAC AGACACCCCTC AAATAGGCAC TTGGTGTGTT  
 CAGCTGGGGG CTGGAGAGAT CTGGGGCTTT GGCTCCAAA GGNAGGAGCT GCTGTCCCCA GAGAGGAGAC AACAGCTTCT  
 GGAGGCTCTG GGGACTCATT GGATGGGTAC TGGCTAGGTA GATGGGAAGG GGGCCTGTTT AAAGAAGACC CCCCACCCCT  
 ACTGCCCATT TCACCACAAC AGTGAATTGC TGGAAAGTTT GTGCCCTGCG GATTTCTGAA TATAGTGGAC AGGCATTTCT  
 AAAGAGCGCA TCACTGAAGG GGCAGAGGCT NGCCTTTAAA TGTGGGCTTT GCATGTTTTG G

SEQ ID NO:2243: (Length of Sequence = 359 Nucleotides)

ACCATTTATT AAATCAGACT GTTATCTTA ACAGTTATGT AAGTTACATG TATGTTTAAG TCAGAGTATT TCACATGGAA  
 AAGTTTITAA CTCCTATAGG CAAGCAAAAT CATATCACAC AATATATAAG TGGGAAGGGG ATACTGCTAA ACATTCAAAT  
 AAGGCAAGTA TATAAAACCA ATAAACAAT AATGAAAAA TTCAAGCATT CCTTTAAGAG AATTCAACAC TACAAGCTAA  
 ATGTACTTTC TGAGTGTIATT CGTATAATCA AGGCAGTGT TCTCCTTTTA AAACATCAGG AAATGGAATA AGGCTCATTA  
 GTAGATACAG CTGCCCTCAA GATTTCAATT TCAGTTTGC

SEQ ID NO:2244: (Length of Sequence = 362 Nucleotides)

466

ATATGTACTA CATTGGTGG AATACGCATG TACAATTCTT CAAAAATAGT AAAGAGCAAA ACAAACAAA AATAGTAGAA  
 GCACTGGAGA AATACACTAT GGCATAAAT AGTTACGGGT GGGATGTCAC ATGGACCATA TCTACACTCT GTGGCAACCT  
 TCTTACCTGA CTCCAAAGGA TCAGATAATC AAACAGGAAA TTATGGTAGG AAATCAGAAA ATTGAAGTAT GCATTCATAT  
 CCTAAGCATT TTATTTTACG TCAAAATATA AAATATTCAT CAGTTAGCCA AGCTTTGGGA TGAGAGATCA TAGCCTCCTC  
 TTTGATAGGN GTTCTTGTT TTCTTGATTT CATGTTTCAG AG

SEQ ID NO:2245: (Length of Sequence = 333 Nucleotides)

AAGGATCTGA GCGAGTTCAG TGTCATTGTG GGCAACGGGG AGATTAAAGCT GCCAGTGGAG ATCAGTGGGG CCATCGAGGA  
 GGAGTTCACCT GTGGCCCGAC TCTACATCAG CAAAATCAAA TCAGAAGTCA AGTCTGTGGT CAAGCGGTGC CGGCAGCTGG  
 AGAACCTCCA GGTGGAGTNT CACCGCAAGA TGGAAAGTAC CGGGCGGGAG CTCTCATCCT NCCAGCTCCT CATCTCTCAG  
 CATGAGGCCA AGATCCGCTC GCTTACGGAA TACATGCAGA GCGTGGAGCT AAAGAAGCGG CACCTGGAAG AGTCCTATGA  
 CTCCTTGAGC GAT

SEQ ID NO:2246: (Length of Sequence = 347 Nucleotides)

AAACTAGCTT TGGTGGGAAC TCCCTCACC CTGCTCCCCA CAGGAAGGCA TTAATCTATT TATGAGGGAT CTACCTGCTA  
 TAACCCAAAC ACCCCACCAG CCCCATCTC CCAACACCAC CACACTGGGG ATTAAATTTC AATGTGGGAT TTGGAGAGGA  
 CAAATATCCA AACCATAGCA GTCTTAAAGT ATTTAAATTA GAATTTAAAT TAAATTTTAA ATTACAGTAT TTAAATTAGA  
 ATCATTTGTG GAGTTTCTAA AAGGTATGCA TTCCTAGGCC CCTCTCAAGT TAGATTTATG GACACTGATC CCCAGTCTGG  
 AATTTTAAAA CAGCAAAATC TCATACT

SEQ ID NO:2247: (Length of Sequence = 357 Nucleotides)

CACAGGACAT GTCCTGTCAG CACAAGCACT CCCAAGTCAA TCTGAAAAGC AGGCAGCAGC ATTGCAGGGG ACAGGTCTCT  
 CCTGATCTG GGTGGTGGTC TTCTCCCACT TAAAGCACTA TATACAGGGG GAGGTCCCAG GCTGGACATC TTTACCAGGG  
 GCTGGGAGAA AGCAGGCGGT GCTCTGTGGT CTCAGAGTCT TCCTGGCGCT CTTTGAACCT TGACAGAACA TGACCTCAGT  
 CCCAGCCAGC GAGTGGCAGA GAGGACTTTG TACTTGGCTG CAATAAAACA TGCCCTTCTT CGCAGAGACA CGAACAACT  
 CGTCTCTACC AGAGGCCTGT GAGACATCAG CTCAGGA

SEQ ID NO:2248: (Length of Sequence = 327 Nucleotides)

TTCTCTTTAT TAATGGCTAG AAAGTCAGGT TCACCCAAGG AAGTCACTGA GGGGCCACAG CATTGAAGGG TATGGGGTTT  
 GGAGAGATAG GAGCAGGACC CACCACTCAC GTCCAGAAC CAGGGGGCAC ACCTGGTCCA AGAGGTGGAG GCATTGGTCA  
 CTGGAGTCAC GAGGGTCAGG ACAGGCACTG AGAGGCTGAG GGAGTNTCGG TCCGGAGGGA GGCAGTCACG GGCTAGGGCT  
 GGGAGTCGTA GCCAGTNTGC AGGGCCTGGG AGCCCCAGGG CTGATGCCCT GGGCTGGCGT AGTACTCCAC CACCTGCCGT  
 GGCACCT

SEQ ID NO:2249: (Length of Sequence = 404 Nucleotides)

ATTTTAAATT TAGGTTTGT TTATTTAAGT TTAATGTAA TTCCATGCTG TGTTTCAGTA AGAACATAC AGATTCTGTA  
 TCTGTGGCTC CAGTCAGATA TCCAGTAGTA CAAATTAGCT TCAAGTTACA CATACTGAAC AAAAGAGGTT GAGCGAGGGA  
 AGGAGGGGAG GAGTGAGGGG AAGGAGGTAG GGGGAGGGG AAGGAGAAGA AACAAAAGNN TTGAACAGGC ATGCAGGCTT  
 TTCCATACCA CCTTCAAGC TAACCTGCTT CAGTGGGAGA GTAAAGTAGG CAAGANTGAG CAGCCACGGG ATTGTTGAAC  
 TGTTACCCAG CACCATGCTT TTCAGCAACA TTTTCAGCGG AGTTTGGGAA CATTTTTTTA CCAGCAAAAA CCATTACACC  
 GAGT



467

SEQ ID NO:2250: (Length of Sequence = 275 Nucleotides)

TGCCAAATAT ATATATCTGA ACATAGTGAA AAAGTAAAT TTAATAATCAG TCAAATTATT TTTAAATTC CTTTGCTTAA  
 TAGCCATTAC TTAATCACCT TTTGTTTTTG TTTTINCCTT CAACTACTAG AGTACTGTAC TTTTGCTTTC ATTCTTTCTA  
 TACATTCTGC CTTTCATCCTT AAATTGTTC ACTCGATAGT GCTAATATTG GTAGATAATC TACGCTAGCT GCTGTTTCTT  
 GTACAGAAGT TGGTTGATAT CGCTGATTCA CTTTT

SEQ ID NO:2251: (Length of Sequence = 426 Nucleotides)

GGAATAAGGA GATGAGAGCA TGCTCTGCCA ACTGGCTGGG ACCTGAATGT GCTAGGCAAG TNCCTACTACA TCAGCTCAAG  
 AACATAAACA AAAATGTAAT TTAATAAACA GATGGTTTAA AAAAATATCT GATAAAAATT ACCTATCCCT CTCCTTGCT  
 GTGAAATAAT TTAATAAATT TATTCTAGAT GTAAAAATAA TAATACAAA AAGTTTGTTC AAAGACACCT GTGTCTGTIT  
 TGTTAAGTGT GCAGTCTGGG TCCCTTGGGG TGGAGGGAGC TGGCCAAGGA ATGGCATTGT GCAGAGGCAT ACCGGGAAGC  
 TCTCTGGATG CAACCCACC TCTACCGCTT GGCAGTCAAT GACCTTGGGC ATGATGTTTC TTCATTCTC TGAGGGCTAG  
 GGCTTTGATT CTGAACATGG GGGGCT

SEQ ID NO:2252: (Length of Sequence = 315 Nucleotides)

GAAAGATAA ACAAATTAA TAGACCATTG GTGAGATTAA CCAAGACAAC AGGAAAGAAG ATCTTAATAA GCTCAATTAG  
 CAATGAAATG NGAGCTACTA CAACTGATAC CACAGAAATA CAAAGATCA TTCAAGGCTA CTATGAACAC CTTACCGTGC  
 ACAAACTAGA AAACATAGAG GAGATGGATA AATTCTGGGA ATTTAAGAN TAATACAATG GACTTTGGGG AATCAGGAGA  
 AAGGGTAAGA GTGGGGTGAG GGATAAAGA CTACACATTG CATACAGTGT AACTTTCTTG GGTGATGGGT GCGCC

SEQ ID NO:2253: (Length of Sequence = 335 Nucleotides)

AGATTATTC TCATGTACAA AGCGGTCAGC CCACGGGACC ATATACGACA GTTGACAGGA GTCCTAGAAA AACGCATCIN  
 TCTAAAGGCA ACTCAGAAAG GTAAGGCAGG TGGACCCCTT CCCCCACCCC ACAACGCACA CAGAATGAAA CGGAGAAAAA  
 GAGAGAAGCC AGTGGCCGGG CTGACCCAAG AGTCCCGGCC CTATGGGGTC TCCCAAGCCC CAGGGCACAG GTGGATATGG  
 CCTGAAGAG AGAGCCCTGC CAGGGCTNAG GCCAGGTCTC TCACTGGCTG CAGGAATNGG TAAGGGGCTC AGGCCAAGGG  
 GAACACTTCA GGGG

SEQ ID NO:2254: (Length of Sequence = 380 Nucleotides)

GGAGGCTCT GGAGAGGTTT CTGCAGGATT ACTTTGATGG CAATCTGAAG AGATACCTGA AGTCTGAACC TATCCCAGAG  
 AGCAATGATG GGCTGTGAA GGTAGTGGTA GCAGAGAATT TTGATAAATA ATATACAATA ATCACATCCA CTTTCCACCA  
 CCTACACAAA AAACATTTCA TACAGACTGC AGTACAGTGA TTTTTTTTTT TGAACATAAA GGTCAAAATT GTTTCATTTT  
 CTCTCTGCA GATTCTAAGT AAAAAATGAC AAAATATGCA TAGAGATGTT TGTAACCAA AAATAAATGT CTAGGGCCCC  
 GAACCCATCT GAATGGGACC CCTCTCTCA GCCAAGGGCA TTCCAAAATT AACCTGCAA

SEQ ID NO:2255: (Length of Sequence = 399 Nucleotides)

ATATAAAAAG TGTCTCTGTG ATTCTNCAGA GCCCAGGAGT CAGTCTGGT GGTGGAGGG ACCTGCCCCC ACTGGTTCAT  
 TTAACCTCT GTCTCGGTGC CCTCAGAAC TCAGCCAGAA AGGCAAGGAG GAAATCAGAG CAGGAGCCTC ATACTCTTGG  
 TGATCTATTC ATTCTGTGAC CTCAGGGGTC ACATATAAGG TCAGTGTTC TCGTCCCCGC CGGATCTGCA CTGCCAACTG  
 GGATGGGTT CGAACAGCTT CATAACATC TTCAGCATTT TGTACCATCT GCTCCCAAT GGCCAAAATC ACATCACCAG  
 GNCAGAGACC CAGCCCGGTG TGCAGGGGAG CCCAGGATGA CTTTATGGGA TGAGTACANC ATGCTGAACA TCGGGNAAG

SEQ ID NO:2256: (Length of Sequence = 371 Nucleotides)

468

TTTTTTTTTT TAACTGTAAA TGCTATTTTA TTTTAAACAT TTTTGTTTAC AAAAAAAAAA AAAATCAATG ATTGGTACCT  
 TTTTACACT CTCAGATTCC TGAATATGGA CAGATCTTCA AAGGGAGGAA GGAGTTCTCA TATGAAATTT AAGATAGACT  
 GTCTGAAGG TTGTGGGGTG GGGTTTTTTG TTGIGTTTTA ATTGCTTTT GTTTTTAAGN CACAATAAAG CTAAATGTC  
 AAGTCTCTGG GAGAGATCCC CTAAAGTTT CAGTCAAGGA GCATATCAGA GCACAGACAA GGGACCCCA GCCTGGTGCC  
 CGCCGGCCCG TCCCGGCTGC CCAGNGTAT TTGGTAGCGC ATGGGTTGAG A

SEQ ID NO:2257: (Length of Sequence = 372 Nucleotides)

AACCTATGG CACTAATGTA TGATGGATTC ATTTCCAGAC TGTCGGCCAC GGAAGCACTT CTTTCATGGCC TCTGCCCTGG  
 ACAGCAGCCT GTCTCCGGG CTCCCATGT TTTTACCAGC TTCTGCTGAG TTTCTACAAT CTTGAGCTCT GCTGAGAATT  
 CTTTTCTTG AAATTCCTCT ACCTAAAGCC CCAGCCCCCA AAAGAGCATG TCTCAGGAAC TCATTATGCC CTGAGTCAAC  
 AAGAACTTGT TGATAAATGG CTAAAGTTT TTTACAAGAA GTAACCTCCC TTGGTAAGGA GTAAATAATA GCTCTGGGAA  
 TTTTCCAGAT AAAACTATTT CATTTCTCTG GTCAGTGGCC CCATGGGGAG AG

SEQ ID NO:2258: (Length of Sequence = 340 Nucleotides)

CTCAGCCTCC TGAGAACCTG GGATTGCAGC CTCCGAGAA CTTGGGATTG CAGGCACCTG CTGCCATGCC CAGCGAAGAT  
 TTTGTATTTT TAGTGGAGAC GGGGTTTCAC CATGTTGGCC AGGGGGTCT CAAACTCCTG ACCTGTGAT CCACCCGCT  
 TGGCCCCCA AAGTGCTGGG ATTACAGGGG TGAGACACCA CGCTGGCCT TTATATATAT TTNAGAGAG GGGGTCTCAT  
 TTTNTGCCC AGGCTGGTCT TGAACCTCTG GGCTCAAGCA ATCTTCCCGC CTCAGNCTCT CAAAGTGCTG GGGATTACAG  
 GCAATGAGCC NACCGTGNCC

SEQ ID NO:2259: (Length of Sequence = 394 Nucleotides)

CCCCCAGAT CCCACTGTTA GGAGAACGCC TCTGCTAACA TTTTCTCTAT CTGTATATCC TCTGGGAATG AGACCCACTA  
 AAGGGCTAGA GTGTGCTCA GTGTGAATTC CTCTTCTCG ACTCCATCTT CGGGTAGCT GGGACCGCG TTCACTGCC  
 AATATGCAGC TCTTTGTCG CGCCAGGAG CTACACACCT TCGAGGTGAC CGCCAGGAA ACGGTGCGCC AGATCAAGGC  
 TCATGTAGCC TCACTGGAGG GCATTGCCCC GGAAGATCAA GTCTGTCTCC TGGCAGGCGC GNCCTGGGA GGATGAGGCC  
 ACTCTNGGCC AGTNCGGGGT GGAGGCCCTT ACTACCCTGG AAGTAGCAAG GCGCATGCT TINGAGGTAA AGTC

SEQ ID NO:2260: (Length of Sequence = 359 Nucleotides)

TTTTTTTTTG AGATCTGAGA TTCCTTTAAT CAGAAGCAG TGCGTCCAC AGTGTGCTCT TCAAGCCCCA AAGGGCAGC  
 CTCTAGGACT GNTCCCTAG AGCGAGGCTC GGGCTCTGG TAAAAAGCA TTTGCTTGAT TTTATTTAAA CAATGGTGAA  
 TCTTCAAGGT GCCAGTCTAC ATGCCAACA GTCTCCAGG NTTCAAGNC ACAGTCACG TCACTCAGAG ACTGCCTCAT  
 TINGCAAGAG AGAAAAACAG TGACCACCAC AGAGGGCAGG GAGTGACAAA GCTGTAGGC TAATGCTGCA AAAGCCGCTA  
 GAAACTGGGG GCCACACACA AGNGCCANC AGGTGCGCC

SEQ ID NO:2261: (Length of Sequence = 360 Nucleotides)

TTTTTTTTTT GAGACAGAGT CTGCTCTGT CGCCAGGTTG GAATGCAGTG GTGTGATCTC AGCTCACTGC AACCTCGCC  
 TCCGGGTCC AAGCAATTC TCTGCTCAG CCTCTGAGT TGCTGGGACC ACAGGCGCAC GCACCAGCC AGGCTAATTT  
 TTGTATTTT AGTAGAGAG GGGTGTACC ATATTGGCCA GGCTGGTCTC TTGAAATCT TAAATCCAAA CATTTCTATT  
 CTTCTAGATC CTTGCTCAG GCGAATCCTT TCATCTTCC CTATAGCTC ATCAGCATGT AAGTGTCTTG ACATCTCTCT  
 TCTCCTTCCC TATTAGCTCT CTACTCTCTN CANTTACAG

SEQ ID NO:2262: (Length of Sequence = 348 Nucleotides)

469

CTGTCAAAAA TGTATTATAT CAATAATTTT ATCAGCAGCA TTTAAGAAAT AAGAAATCAT TAGACAATAG AAGACAAACA  
 TGGTAATGCA GTCAGGCCAG CACACAATAC ACCGTTTTCA TCACACACTG TAACCTGAAT CCTGGCAAT TTCCTAGAGG  
 TATTAACATC ATACCTTATT AAGAATTATT GGGCCCNAGG AGTNGGGGGG TGGGGGGGTT GCAATCTGTC CAATCAACAT  
 CTGGCTCTTA CTTTCTCCCN GTAGTATTAC ATTTGTATAA TATTCTTATA GGAAACAACT CAACTCCATG TTTATAAAG  
 CACCATACGG TTTTCCATC CTGTACCA

SEQ ID NO:2263: (Length of Sequence = 352 Nucleotides)

CCCCAAAAGT TGACATGGTC AATGAAGAAA TAGGCAAACA GCAAAAAGTT GCAGTCATAC ACCAAATGAA AGAAGATCAA  
 AGCAAAATCC CTGAAGGAAT CCAAGTTGAC TCTGACGGGC TAATCACCAT AACAACTCCC ANIAAACTTG CCACGCTCAG  
 TGTTCGAGCC ATGCCCTTC CAGAAGAAGT CACCCAGNTT CTGGAAGAAA ATAGTGANIT GATTCTGTCT ATGGAGCAGT  
 TGACATCCTC TTTGAATNAG GGTGAAAATA CTCACATGAT TCATCAGAAG ACCCINNGGA AAATTTNGGA ATTCAAAGGA  
 AAACITTINAG CAACANCTAA CAGGGNGNTG AT

SEQ ID NO:2264: (Length of Sequence = 381 Nucleotides)

GCTTACAGTC TAGAACAAGC TTTCCAGCC CACAGCCAGG GATGGCTTTG AATGTGGCCC AACACAAATT CATAAACTTT  
 CCTAAACAT TATGAGATCT TTTGTGATT TGTGTTTTAG TTCATCAGCT ATCATTAGTG TTAGTGTAIT TTGTGTGTGG  
 CCCAAGATAA TTCTTCCAAT GTGGCCAGG GAAGCAAAAA GATTGGACAC CCTGGTCTA GAAGGAAAGG CAAATATTAA  
 ATAACCTCAG AAAGTGATAT TACAAATGT GGTGAGTAT AAACACACTA TCAGGTGTTA TAAAGGAAGT GAAGGAAGTG  
 GTGAGGAAT TCTTATCAGG GNAAGTATAT TTANATGAAG GGCCTTAGGG GATGAGTAGG G

SEQ ID NO:2265: (Length of Sequence = 301 Nucleotides)

CACCTTCTCT CCAATCCTGCC TTTCCACAGC AGTCAGTCTG GTCCAAGCCA CCATCATCTG TCACCCAGAC TACCATAGCC  
 ATCTCCTAAC TGGTCTCTCC ACTTGCGTC TTTATTCTGC ACACAGCAGC CTGAGTTCAT ACACACAGCT GCATTCAITC  
 ATATTTTGCT TAAACTGTIT CAATGGCTTC CCATGGAACT TGGGAGTCTG GATATCTTCA CAAGTGTGTN GCATGGCCCA  
 GGACCAATCT GGACACCCCT NCCTGTTTGT NCATNCATGC CTGSCACCAC TTTTGGCCT T

SEQ ID NO:2266: (Length of Sequence = 360 Nucleotides)

CGCCTGCATG CCCCAACA ACACAACTTT ATTCTCTCC CAAACATCTG TCAGGCCTGG CCTTCTGAG CAGGAGCTGA  
 GCAGGAACAG GGCCCTGGCTG CCTCTCTCTG GCCACAGCTC TGACCTGGGC AAGGCTGGAA GCTGGCATCG TAATGGATGG  
 GGGAGTGGGT GGAGGATCTG AGGGTCCCT GGGTAGGTTT CGATACCTTG GACAGGTGGG CCTCATCTG ACTTAGAACT  
 CGGGGAGGGG CCACTCTTCC TTCCCTTCT TCCAGCAGCA GCTCCACCAC CCTCCACCTT CTGTCTCGA CATGTGTNCC  
 AGAAAACCCA GCCATGAGGG ACCGCTNIGA GGAAGGGTCT

SEQ ID NO:2267: (Length of Sequence = 391 Nucleotides)

GATGGAGTCT CGCTCTGTCA CCCAGSCTGG AGTCAGTGG CAAAATCTCG GCTCCGGACC CCCCCAAGAC ACATATGACC  
 CACCACCCA TCTCTGACCA TGAGGCCACC CTGAGGTGCT GGGCCCTGGG CTCTACCCCT GCGGAGATCA CACTGACCTG  
 GCAGCGGAT GGGGAGGACC AGACCCAGGA CACGGAGCTC GTGGAGACCA GGCCTGCAGG GGATGGAACC TTCCAGAAGT  
 GGGCGGCTGT GGTGGTGCTT TCTGGAGAGG AGCAGAGATA CACCTGCCAT GTGCAGCATG AGGGTCTNCC CAAGNCCCTC  
 ACCCTGAGAA TGGGAGCTTG TCTTCCAGC CCACCATTC CCATCGTGGG CAINATTGCT GGNCTGGTTC T

SEQ ID NO:2268: (Length of Sequence = 191 Nucleotides)

470

CTTTCCTCTC CTGTTACAC AGTATTCGAT TATTTCATG GCTACTTTCA GAGGATCAGC TAGAGGCTGA TGTGTTGTTT  
CAATGGTTAT ATTATTTATG AACTGAGAGT AGAAGAAAAA TTTGAGAGCA GGTTTTTGA AAAATGAAT TTAGACAAAT  
ATTTAGTAAC TGTATGATAT ATAACCCCC N

SEQ ID NO:2269: (Length of Sequence = 237 Nucleotides)

TAGAAGCATT TTTTAAACAA CACTCAACTT TGTGAACCCC TGAAGATTTT TTGACCGTTC CAAGTCTTAA TGCCACACCA  
CTATTCCAGC GAATTTATGC TACAACGGT AACAAATGACC AGAAGCCTGA AGAATTAAAA TGCCAACACC AAACCTTTCC  
NTACCAGCTC TGGNCTATAT TGCTCCCATG CATTTAATAT ATTATNNGT TTTATANCCA CTCTAAATA TTCTCAG

SEQ ID NO:2270: (Length of Sequence = 223 Nucleotides)

AAAGGTTAAG GAATTTCCIT TATTTTTTAC AAATTAAGAC TATGCAGATT TCATATATTT CTGAATCAA AACACCTTTG  
TCTTCACAGT ATGAGTTAGA ATGCAGCCTG AGCTGAAAT CAAGAACTA GAAAAGAAAG TGGTAGAGAT AACTATATTA  
AAAANCTGTT AGGTATTTCC TTAAAAGTA GGTGTTTTT TTTTTTNC NICTTTTTT TTT

SEQ ID NO:2271: (Length of Sequence = 363 Nucleotides)

TTTGATGGGT GAGGCTGGTA GAGCCACTGG GAGAATGTGG GGCAGTGAGG GGAGGGACAT CTTCCTAGCA TCACCAGCAT  
CCTGAGCTTT GTCTTGTTT GGGAGTCCCA CAAGGGCTGG TGCAAGGNTT AGCAGCTGCT ACTTGAACCC TAATCCCTGG  
GTGGATGTGG TCTCTGTAA CTTAAGAGCA AATGTTTGTN ATGACATGCA CGGGTGGGCA GAGGTTGAAA AGAACAGGGG  
TCTACGGAGG AGCCAGGCCA GCCACGTGAG ACCCTTCTTT CTAAGTGGC TTCTGTCCA TTCTGGGGA TTTGGGAAA  
GAACGACAGA ACTTACCTTC CATCTCCTT CTCACAAGCA GTG

SEQ ID NO:2272: (Length of Sequence = 150 Nucleotides)

CTCCCCCTGT AATCCAGCG CTTTGGGAGG CCGAGGCGGG GGGATCACGA GGTCAAGAGA TCGAGACCAT CCTGGCCAAC  
ATGGTGAAC CCCGTCTCTA ATAAAAATAC AAAAATTAGC CGGGCATGGT GACGTGCACC TGTAGTCCCT

SEQ ID NO:2273: (Length of Sequence = 330 Nucleotides)

TATATTATGT TAATAAATC ATGTATAAGC AAAAGACCTA TGAAAGTATA AAACAGACCA ATGGATTTTA GTATAAAAGT  
ACAAAACGTT CATTTAGGTG GGTTCAGTTT TOCCACAAA ACTAACCTTT AAGAACTAC CACTTATCAA GTTTTGGTAT  
AAGGTATAAT ATGAAAGAG AAAATCCATA ATTATTTGAA AAACACGCTT TAAATACCTT CCTTTTTTCC TACTACATAT  
CTCTATTAGG CTGGGTTTTT TACACAACTA ATTGAATACA AAAACAAATA TGAGNATTTA GCTGTAATCT ATTAATCCCG  
ACATTACAGG

SEQ ID NO:2274: (Length of Sequence = 372 Nucleotides)

AAAAAGCCAG TTGCAGTGGT ATATGCCTAT TGTCCAGCT AATCAGGAGG CTGAGATGGG AGGATAGCTT GAGCCCAAGA  
GTTTGCAGCT GGGCCTGGGC AACATAGCAA GACCTATCT CTAAATCAAT CAATCAATCA AACAGTGGTA TGCCACCCAG  
AATAAGTATC TTTTTTGAAG TAAAAACAA AAAGCGAAAT GGGACAACA GGTCTGGTAG TGGTGGCTGT CTGTCAGTA  
CAATGAGGTC TCTGCAGAGC CGTTCCTTAC CCTNCCCAAC CCCCTAGACA TCAGGTCCCT TTCTAGGAA AATGAGAGCA  
CAGACCTAGG NCCATGNGCT CCCAACTTT TTCTTCTCTT CACTACAGAT TC

SEQ ID NO:2275: (Length of Sequence = 370 Nucleotides)

CTTATCTTTT TCCTGAGGAT GTTGTTTTTA TATGGATTGT CTTTAAGCAT CACTTGGAAA CGCTACAAAT AATGCAGCTA  
AATGTTAAG CAATTAGGAA ATAGGAATTT TTAAATACAG AATTTTGCAC TGCAGAGTGT TTACAAGTAT TAAAAGATTG

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TATTACACAA CTGTGTGTTAA ATTCTAGTAA GATAAATTGA TACTAAAGAA AACAAACCCA GAAAGATCAA GTGACTTGNN  
 TCACACAACA CAGGNATTAA GANGGAAATT AGTATTCTTT GTTGGAAATAT TTTCATTG AATAGTTACA GGAAAATTTA  
 TTTGCATATT TTACAAATTA AATGTGTATT GGACATCATA GTGGGGAAAT

SEQ ID NO:2276: (Length of Sequence = 349 Nucleotides)

TCTCCAGGTC CTGGAGGCAA CCGCAGAAAC AGAACANTGC AAATGCCAGC ATTTCCGCAG ATAAGCGTGG CCGGCCAGCT  
 GCAAACACCC CTGACATGCA GCGTCTGTT TAAATCTGG TTGCCCGCTG CAGCCAGTGG AGCTCAGAGG GCTGCCCTGGC  
 GGGTAAGGAC TCCAGGCACA CAGCAACAAG TGGCTGCCAC CTCAAATCCC ACGTGGGAATA TGATGGGGTC CGAGCCAGCC  
 AGTAACTCCA NGAGGGCTGT AGTGTGTAAG TTCGGCCAGA GTTTCAGAT ATAATANCAT TGGCCCCACG ACGTAGACCT  
 GTGGCGGCTC AGGGTTAAGA GACGGGAGC

SEQ ID NO:2277: (Length of Sequence = 182 Nucleotides)

CTTATATAG ACTCTGGTTC TAGAACTCG CCTGCAGCCG CTGGCTGGAC CAGCACAGCG TGACGGGGCC GGACTATTTA  
 CAGGCCCAAT GCGGGCTGTA CCTTGGCCAC CTNCCGGCAC GGTGCTCAGC TGTGACGCA AAATAAGTTA GGGCCGGCCG  
 GCGGGGGCG GCGGGGACG GG

SEQ ID NO:2278: (Length of Sequence = 276 Nucleotides)

GTATTATTTT CCCCAAATGA AGCAAAGCAA GTACTGGGCG GGAGTCATCA GAAATACCTT GGGAGGTGGT GGGGAGGGGA  
 GTGGGAGCA TCAGGGAAAA CCCATCTCAA CTCACGCC TCAGGGGTG CCACTGGAAA NTCTTGGT TTCCATCACT  
 GGTCAGAAA GAACTTCCCC AGGAATGGCC AGTGGCCTTT CGCCCGTAAC AAGGCGCAC GCTCAGAGCA GTCTTCTCC  
 TGGGCTGGGT GGACGCGGAG GCGCGAAGGA AAGCCT

SEQ ID NO:2279: (Length of Sequence = 193 Nucleotides)

TGCACCCATG GCGCTCTCA GAGCCCCAGG GCGCCTGAGC AAGCAGGGCT CTGGCAGCAG CCAGCCCATG GAGGTGCAGG  
 AAGGCTATGG CTTTGG GGAGATGATC CCTACTCAAG TGCAGAGCCC CATGTGTGAG GTGTGAAACG GTCCCGCTCA  
 GGTGAGGCG AGGTGA CCTTATGCGC AAG

SEQ ID NO:2280: (Length of Sequence = 401 Nucleotides)

GTGATTTTCC TGTCTCCGTC TCCTGAGTAG CTGGGATTAC AGGTGCCAAC CACCACGCC AGCTAATTTT TGTAGTTTTA  
 GTGGAGACGG TTTCGCCATG TTGGCCAGGC TGGTCTGAA CTCTGACCT CAGGTGATCC ATTCCCCTCG GTCTCCCAA  
 GTGCTGGAAT TACAGGCATG ACCCATGCG CCGGCCCCA CTGTTCCCTT TCTAATCGAG TGAGAAAATG GTCAGTATTT  
 CTGTCAACAA AATTCATGAG GCTCTTTGTA CGCACAGGAC TTCAGGCTT TCTCTCAACA ATCGCCAAAG CTGGAGGCAT  
 CCACAATGGA GGAACAACCT GGGGTTTGTG AAAAAACAGG GAATGTTTCC AGAATINTTC TTCAAGAGTA TTTACATTTT  
 T

SEQ ID NO:2281: (Length of Sequence = 217 Nucleotides)

AGCACGGGGA TTGTCCAAGG GTCTCCGGC GCGCAGGGCA GTGGTGGTGG CAGCACGAGT GCGCACTATG CAGTCAACAG  
 CCAGTTCACN ATGGGCGGCC CCGCCATCTC CATGGCGTGG CCCATGTCCA TCCGACCAA CACCATGCAC TACGGGAGCT  
 AGGGGCGCGN CCGCGNAAC TNACAGCAC AGGAAACCAA ATENATGTCC CTGCCCC

SEQ ID NO:2282: (Length of Sequence = 302 Nucleotides)

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COGATGGTGA AGTGGTAAGA GGTCGATGGC CTGGGAGTTC ACTTTATTAT GAAGTAGAAA TTCTGAGNCA CGACAGCACC  
 TCCCAGNTTT ACACTGTAAA GTATAAAGAT GGAACAGAGC TTGANITGAA AGAGAATGAT ATTAAGNCTT TAACTTCCTT  
 TAGGCAAAGG AAAGGTGGCT CAACTTCCAG TTCCCCTTCC AGACGCCGAG GGAGTCGATC AAGGTCACGC TCCCGATCCC  
 CCGGTGCGACC ACCTAAAAGT GCGCGCGAT CTGCTTCTGC TTTCCACCA GGGCGACATT AA

SEQ ID NO:2283: (Length of Sequence = 314 Nucleotides)

GAAAAAGTGG AAGTCATCAC CGGGGAGGAG GCGGAGAGCA ATGTGTTACA GATGCAGTGC AAGCTGTTTG TTTTGTACAA  
 GACCTCACAG TCCTGGGTGG AGAGAGGCCG GGGGCTGCTC AGACTCAATG ACATGGCGTC CACCGATGAC GGCACACTAC  
 AGTCCCAGCT AGTGATGCGG ACCCAGGGGA GCCTGCGACT GATCTCAAC ACCAAGCTGT GGGCCCAGAT GCAGATCGAC  
 AAGGCCAGCG AGAAGGAGCA TTCGCATCAC AGCCATGGAC AACGAGGACC AGGGCGTGAA GGTCTTCCTG ATCT

SEQ ID NO:2284: (Length of Sequence = 262 Nucleotides)

GGCGTGACAC ACGCGCCCGG CCTGTGGAG CATTTTAAAA TCTGATTCCT TTCCCCCTGA AGTTCCGTT CAACCTTNN  
 CTGTGGTCAG GTTGATNCT TTAATTGCTA AAACAAGTCA AAATCAATA TCCATGGCAG CTGACAATTC AGACTTTGGC  
 ATATAAAGTA AAGGGTTTAT TTTTCCATTC CTCTGTAAAT GGTGTGTINT TCACTTATTT ATAGTGCTAT GAAGCTGGTC  
 ACCTGGGAGA ATGGCATAAC TG

SEQ ID NO:2285: (Length of Sequence = 193 Nucleotides)

GTGAGACACA GTCTTGCTCT GCTGCCAGG CTGGAGGGCA GTGTCTCGAT CTGACTCAC TGCAGCTGAT GCGCCCTGGG  
 TTCAAGCGNT TTTCCACCT CAGCCTCAA GCAGCTGGGA TTCAAACAT GNAACCACCAC GGCTGGGTAA TTTTGTGTGTC  
 TTTAGTAGAG ACGGGGNTTT GCCANGTTGG CCA

SEQ ID NO:2287: (Length of Sequence = 342 Nucleotides)

AGGCTGGAGT GCACTGGCGC AATCTTGGCT CGCTGCAAGA TCTGCCTCCC AGGTTCCACAC CATTTCTCCG CCTCAGCCTC  
 CCAAGTGGCT GGGACCACAG GCACCCACCA CGCCTGGCTA ATTTTTTTTG TATTTTTAGT AGAGACGGGG TTTCACCATG  
 TTAGCCAGGA TGGTCTCAAT CTCCTGACTT TGTGATCCGC CCGCTCCGC CTCCCAAAGT GCTGGGATTA CAGGCGTGAN  
 CACTTGCGCC CGGCCCTTAC CTGTTAGTTT TTCAAGAGGT GTTCGTGATG TCCACTGTGA TAGTTATTTT GTGTGTCAA  
 CTGACTGGGC CACGGGGTGC CC

SEQ ID NO:2288: (Length of Sequence = 343 Nucleotides)

TTTTTATTGT AATGAAATTT TAAAAGGCAG TTACATTAGT TACACATATA CACAACCGAC TTAATAACTG TTAGTCATAG  
 AGAACATTCA AGAAATACAA ATGATTTATC CACAGCACAG TTCACATCCA TAAGAAGAAA GAGAAATGGT TAAGTACTTA  
 AACTGTCCAC TGACACCTGC TTATGAAATC TTTTCCTTTC TTTCTTTTTT TAAAGGAAAC TGAGATTGTT AGATGAAGCA  
 AGCCGTCCTG CTCCCGCACA GCCTGTGAAA CCTCCATTTT GCCACTTTCA AGGTCAGTGC CCCACAGACC CTGGGCTGTT  
 GTTGACCATA AACTAGCTT TGG

SEQ ID NO:2289: (Length of Sequence = 160 Nucleotides)

CGGGCCGCAA AGCTCAGCTC CTGGCGGTCC AGGCCCTGGT GGCTCTTGAT GATCAGGTCC ACGGCGGCTG CCACACGNTC  
 CTCTAGGCCC TTCAGCGGCA NAGCGNCTCC AGCACCTGTG TGTGCTCCAT GTCCGTNAAC TGCTGCACGA AGAAGCATAT

SEQ ID NO:2290: (Length of Sequence = 310 Nucleotides)

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CCGACTCTAC TGAATAATACA AAATTAGCCG GCGGTGGTGA CGCATGCCTG TAATCCCAGC TACTCGGGAG GCTGAGGCAG  
 GAGAATTGCT TGAACCCGGG AGGTGGAGGT TTGCAGTGAT CACACCACTG CACTCTAGCC TGGGTGACAA GAGCAAACT  
 CTGTCTCAA AAAAATAAAA AAAAGNTTAA ATGAGGTCAT GAGGGTGAGA CCTGATCCA AGCTCATAAG TGTCTTAGA  
 NGTGTCTTA GAAGTGTCTT TAGGACACTT CTTCTAAGT NTCTAAGTT GGGGAGCTTG CTCTCCCCAA

SEQ ID NO:2291: (Length of Sequence = 270 Nucleotides)

CAAGACAGGG TCTCATTCTA TCTATGCCC AGGCTGGAGT GCAGTGGTGC AATCTTGGCT CACTGCAGAC TCAACCTCCC  
 AGGNTCAAGT GATGGAATTC CCNCAGTTTG TCTTTGACAT TAAGANGACA CCACATATAG ACGGCTGTTT GTCAGTGATT  
 GCCCAGGNAT TCATGGATGC ATTINCTCTC ACAGAGCAGC AACTAGGGAA GGAAGCACCA ACTAATAAGC TTCTCTATGC  
 CAAGGNTATC CCAACCTACA AAGAAGAAGT

SEQ ID NO:2292: (Length of Sequence = 332 Nucleotides)

CAGTTGTCTT ATATTCTCCA CCTCCCTTG GTTTCATTTC TCTTCGCTTC CTGAATGAGA AGTGCCTGAG ATACCTTCAT  
 TTCTCTTGA AGTATTGATC CAAGTTTAGA CAAATATCTC CCTCTTGTG GAGAGAATTC CTTATATGTG AAAATACCAA  
 GACATTCTTG ATATTTAGCA GGCCTCAA TATTTGTCTC CTCTTTTTTA GCATAATTAA GCCAGACTGA TGTTTGCATT  
 TGAGTATCAT CAGCATGAGT AACCNTTTTA ATCTCTCTTC CCTTAACTAC TTGTTCTACA CTAGAGTCTA GGGTCAGGGT  
 ACGTACAGTG AT

SEQ ID NO:2293: (Length of Sequence = 255 Nucleotides)

GCACCTGACT TATGTGAGIN TCAGGCTTCA ATGCCTGINT TAGAGCTACT CCTTCACACA AAATAGTTCA GAACATAGAG  
 AAGGACCAAG GTTAATAAAT GATTTTINATC CCAACACTA AACATGATTG ATGGGTAGAG GCTGCCCGAA GTACTGTGTA  
 AAGATGGAAT CTGAGATAGA AGAATGCTGT GGTCAATTAG TAATCTTGC CCATGGAGGG ATTAGTGACA CATGCCITGT  
 ATATTTGTCA TCTGT

SEQ ID NO:2294: (Length of Sequence = 236 Nucleotides)

GGCTTCAGAA GCTATTGGAA GATTCATATC AACTTACTAA TAATCAAGCA CTTTCATATT AAGACAATGT ATGATGTTTA  
 GTAAAATTGA TTTTNCCTA AAAGAAGTTT AAAATAAATT AGCTATTTC AGAGNATCAT GGTGTGCAGC AAATAGAAAT  
 GTGTGCTTA ACTCAAATCA CAGTAATATT CTGTGGTAGT CAATTGATTT CTTTGAGCCN TTATTCTTTC ATCTGT

SEQ ID NO:2295: (Length of Sequence = 308 Nucleotides)

TTTTAATTTA ATCAGTAACT TTATTATAAC AAAACCTGTA TATTACCCAT TTAACTCAT GTGTAACTT CAGTGATGTG  
 AGCTGTATTA AACCAGGTA TTAGTGAAAA TTGCAATTGT AAAACCTGGT AACAGTAGAC ATCTATGGGT GGTCAAGTAA  
 TCAAGGACAC CTTTTATTTT AAACAATTTT ATATAATTCA TATCAATATG CAAAATTACC ATAAAAGATA CANGGATTAA  
 TACATATTTA CATTTTTAGA AATAGTTACT CTGAGGTGTA CAGCTGTAC TTTTCTAAAT ATTTACAG

SEQ ID NO:2296: (Length of Sequence = 279 Nucleotides)

ACCCCTCCTG GAGGCTTTCC CCTCCCCAG GGCTTCCCTC AGGGCTACGG TGCCCCGCCA CAGTTCAGTT TTGGCTACGG  
 GCCTCCACCT CCACCGCCAG ATCAGTTTGC CCTCCGGGG GTNTCTCTCT CCACCAGCCA CTCCCGGGG AGCACCTCTG  
 GCCTTCCAC CGCCTCCGTC TCAGGCTGCC CCGGACATGA GCAAGCCCC GANAGCTCAG CCAGANTTCC CCTATGGTCA  
 GTATGCAGGT TACGGGCAGG ACTTGAGTGG CTTCCGACA

SEQ ID NO:2297: (Length of Sequence = 306 Nucleotides)

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CTGAGAAGAA AGAGTGTGTT GTAAAGGACA ATGACTTTGA GCCCAGAGCC CTGAAAGCTA ATGGAGAAGT TATCATTGAA  
 ATTCCAACAA GAGCTTGTGA AGGACAAGAA AATGCTATCA AGTCCCTGGN GCATGTACAA TTTNAAGCAA CAATTGAATA  
 TTCCCGAAGA GGAGACCTTC ATGTCACACT TACTTCTGCT GCTGGAACTA GCACTGTGCT CTTGGCTGAA AGAGAACGGG  
 ATACATCTCC TAATGGCTTT AAGAATTGGG ACTTCATNGT CTGTTACAC ATTGGGGAGA GAACCC

SEQ ID NO:2298: (Length of Sequence = 307 Nucleotides)

AGTACACCTA GTATCTTTAC AGTGACTATT AAGTATTTTT GAAGTCAAAG TATATATTCA TCTTAAACTC CTGGAAGTAT  
 GAACCCCTCCC ATGTAATTTN CTGATGAATG AAAAGGAAAA CTTTCTTTCA AATAAGTGTG ATCTGTGCA AAAGTATGTG  
 ATTTAAAAAC ACATGTAAAT ATAATCTTAG CTCTAATGTT TTCCPTTGGG AGTTTGGGAA AAAGCAGTTA CATTTCCTG  
 TTGCTGTGTT TTTATCATTT GAAAATTGGA AGGATTCATT CTGGATTGCT GAGCTGCATC AGTAGGG

SEQ ID NO:2299: (Length of Sequence = 289

GTITTTAATG CATTTTTTTT AAAGATTAAA GTAAAATGTC TCAATTGTAA AAAATACACA CCGGGCAAAT CCTTACCTGG  
 NTAATAAATA TCTACATCAC AGTACAATAA AATTNCTNCT CTATAAAATT TAAATATGGA TTATAGTCTA TCACTATCAA  
 AAGAAACACT ATGCTAATAT TTCCATATTA TTTAAATAAC AGGAAAAATT ACGNGCTTAT TTTAGAACCT GATGCCATAG  
 CCGTTGGAAA GGGCAAAGAG ATTCAAATGT CGATCATCAC TCTCCATTT

SEQ ID NO:2300: (Length of Sequence = 371 Nucleotides)

CACCCATTGA AAAAGCAGCC GCCCTCCTTC CCAGGAGCTG CTGAAGAGAG AGCCTGCCAG AGCCTTGCCA GCAGGGACAG  
 CCTCTTAGAT ACCAGCAGCG TCTCAGAAC CCACGTGTCC TTTGTCTCNC ACTGTGCGGA CAGCAACAGT GGTGACATAG  
 CTGTNATCGN GGAGGTCCGG ATGGAAAACC CAAAGGAGAG TAGCAGTTCC CTGAAGACTG GGAGGCACAG CTNAGGCCAA  
 GACAAACCAC ACGNAACTTA CCGACTGCTG AAACGCAGGA NCTGATCAT AGAAGCTGTC ACCAATCTTC GCTTAATCGA  
 GAGTTTATTC ACGGTTTCTA AGATGATCAT GGATCAGGAG AAGCAGGAAG G

SEQ ID NO:2301: (Length of Sequence = 287 Nucleotides)

ACTTGGTGTG GGGATTTGTT GTGAGGTTTG CTGACACCTT GACCATTTTT CACTGGCTGG AAATGAAAGG AACTTCCCAC  
 TTGCTCTTTG AAGGCAATTC CATCTCTCC AGGGTCCCTA TTTCTTCCC ATATTCTCTC AACTTCCAA ACTTCTGAAG  
 AAGGGAGCAA ACTTTGGCCA CGAGGAAGGA GTNGAGCTGC CTCTGTACTT GTCAGTGCAC CTGCACTGGT TGAATCCACC  
 TTTCTGGGT CACGCCGCTG TGCTGGGTGG TCACAGCCTA GGACCCC

SEQ ID NO:2302: (Length of Sequence = 358 Nucleotides)

GGAACACAGG ATCCAAACTT GTCGGGGAAC TCGGAGAGAA GATCATCGTT GGCGCGGTCC TTGGTGGGCC CAAGGATGAT  
 GATGGGGCGA GCATAGTGCA CTTCCATCTG CGTCACTGTC TCGTAGTCTA GAACCGAGTC TTCTCGACCC TCGATCCAG  
 AGCTGGAGCC CCACTCCTTG GCCTTTAACC TTGACCACTC TCGTCTCTCA ACCCGCGTT TGCTGGGGAT GAACCCAAATG  
 TCGTCGGTCT CACTGTCAGA GTGGACCCGC CGTGNCTGCC ACCACTCCTC ATCACTAGCA TCGATGACAT GCAGCACATN  
 CCCAAGCGG AAGTCAAGG GCCTGGCTCA GGAAGCCG

SEQ ID NO:2303: (Length of Sequence = 403 Nucleotides)

GTCAGGGGCT CCAGATCATC CTCTCCAAG GGCCCCGAG GCGCCTCCTT GGCCTCTGGC TCCTGCTTGC CGCTGGCCTC  
 CAAGATGGTC ATGATGGAGT TAGGGATGTN AGCTTGCTGG TGGGGGTGA AGGAGCGGAC ATGGGCCAGC AGGGGCTCCC  
 GGAGCTCTGG GCACTTNTCA AAGACGGCTC CCAGCTGCTG GGGCGGCANT GCAGGATGAC CTGGAAGCTC TGGGGCTTTG  
 TGCGCTGGCA GCACTTGATG AAGCCCTCCC ACACCTTGGG GTACTTCCAC AACTGCTTCA TGATGAGGCG GGACAGGATG



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TTCATGACGG AAGCCCCCA GCGGGGGTA CATGGTCANG GACCTGGATG ACGGTCTCA TGAGCAACAT GGGCAAGGGG  
GCT

SEQ ID NO:2304: (Length of Sequence = 376 Nucleotides)

ATCTTGCTAT GTGCCCAGG CTGGTCTTGA ACTCCTATTC TCAAGAGAGC CTCCTGCCTC AGCCTTGTAAG AGCACTGGGA  
TTATAGGCAT GAACCACCGC ACCCAGCCAA GATTGCCATT TTGTATGATG AGACTGGAAG GACCCCATTTG TTTCAGGATT  
TTGCTACAAT ATACAAAAA CAATCTGTGA GACAGTGGCT GGGCTTTTTT CCTGCCTGAT TAGTTTCAGTG CACATACAAC  
TTGGACCAGA GGATCTGGGT TTGAATCCCA TCTCTGATAC TTCCCAAAT GAGCTGTTTT CCTTATTTGT AAAGACTAAG  
ATCGCGTATG TCAAGAGCT CTGTAACTC TCAACACATA CAAAGTACTA CTGCTG

SEQ ID NO:2305: (Length of Sequence = 354 Nucleotides)

CTGCCCAGC TGCTCTGGC CCCCTGGAAG CCTCCCCACA GCTGGTAATC TGGACTTAAG GATTGCTGGG CCACCGCTC  
TCTGCCTACC ACCATTCCAT ATTTAAGTGG AGCCCTACG TAGAAAGGCC CCGGGGCTTT ATTTTAGTCT CCTTTTCAGG  
GATGTCGTGG GCGGGGGAGG GGGTCTTGG TGCTACAGCC CTCTCCCCAC CCTTAAAGGG ACGCCGACGC TGTTTGCTGC  
CTTCACCACA TATTAGTGCT TGACCCTGGC AGGGGACCCC ATGGAAAAGA TGGGGAAGAG CAAAATACAT GGAGACGACG  
CACCTTCAG GGATGCTCGC TTGGGATTCC CACG

SEQ ID NO:2306: (Length of Sequence = 345 Nucleotides)

CCAAGATCCT AAGTAATTCC AAATGCCTTA GATATCAATG AAAGCTACAC ACCATTGAGA TGGGCAAAAT TCTTTCTCTA  
CAAAGGGAGT AATCAAGTAA ATACCTGTCC TCTTTCAATG GACTGTTGCC TATTGAGCAT TGTGGATGAT GTGTTTTCAG  
ATTTCCAGGT GAAGTCTGA CCTACCTGT TTGGCCAAAG ACGTAAATTG AGAGGAAAGG CCTTGGTCTT CTGATCAAC  
CAGCATTTAA CGAACAGTGG CTTAATGCAG ATCACTCAAG AGGNAGCATA GCAATGTAAA AGGAATATAA GTAGGTGTTG  
GATGCCTTTT TCCTAGACCA GGAAT

SEQ ID NO:2307: (Length of Sequence = 337 Nucleotides)

AACAGAATGT AAAAATACGC AAGTCAAAC CTGGTAGAAC TGCATGGAGA AACAAATGGA TTCAATATTA TNAGTCGGGA  
AATTCAACGC CCTCTATCG AAAATGGACA GATCCAGCAG GCAGAAAATT AGTAAGGACA TTGTTGAGCT CTGCAATACC  
ATCAATCAAC TGGATATAAT GGACATCTAT AGACTACTTC AACAACAGCA GAAGATACAT TCTTCTCAAG CTCACATGGA  
ACATTCAAA AGATAGACCA CACGAGGCC CATAAGCAC ACCTTAACAA ATTTAAAATA ATATAATCA TACAGTGTGC  
TCTCAAACCC NCAGTGG

SEQ ID NO:2308: (Length of Sequence = 216 Nucleotides)

GAGGAGTAAA CTTTTTCTG AGAAGCATGC TTAGGTGTG GGACAGGAAG TGGTAAAGGC AATGCATCGT CCACAGAGGT  
GGATGAAGCA GTNACAAAGG AATGATAATT TNANCTGCTG GTGGCATCTN CACTGCTGGA GTGTATGGCA GCAATCATCT  
TACTCTCCAT CATCCTGGTG GGGGGCAGTN GTGCAGGAAA GCCACAGGGA TTCGCA

SEQ ID NO:2309: (Length of Sequence = 289 Nucleotides)

GGGGCTATGA AAATACAAA AACATTAGCA CATTCAATG ATGTATGTGT CTACAGGCAT TTNCCCAGCC CTATGAGAGT  
NCTGCAATTT GAGAAGTACT AAAATGTATT GTTTGGTGAC AAGAACTGCA ATAAAAAGAT AAATGATTIN CTGAATGTTG  
TGGCAAAGCA GTCTATTTCC ACTGCAATTT CTGCTACTAT TAGCTTAAA ATTGCTGAGA CAAAGGACAA CCTTCTGATT  
ATNCTGCTGA GATCTAATGC AAAGTCCTCT CAGANGCTTC ACTACACAT

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SEQ ID NO:2310: (Length of Sequence = 359 Nucleotides)

CTGNGGGCTG CCTCTCGTTG GTCAAATCCA ACCAAAAGCT AAGAGCTGGA GAGCTTGGGT GGTGCATCCA AGGAGGCTTG  
 CTTCTGGGG CACAGAAGGG AGAGTGGAGA AGGATGGAAA GTGGCTCTAG GGGAGGAAAT GGAGAACATC CAGAACTTTA  
 TGTACCTCT GGTGCTTGAA GGCCTTTCTC CAGGGAGACA AAAAGTTTGT NTTGGCTAAA GCTCCCTGGT TGCTCAGGAG  
 CCAAGGTCA CATAATGTGC CAATGGGGT TTTTGCTCT GAAAGCCTCT GAGGTATAAT TACTTGCAAT GNNACATCC  
 CTTTCTCTC TCTTCTCTG CCCACCTTC ATGCCAAG

SEQ ID NO:2311: (Length of Sequence = 324 Nucleotides)

GTINGGGGCC GGCTGGGCA ACATAGACAC CATCTCTTTA AACAAACAAA CATCATTAGT TTCTACATTC TACAAGGTGA  
 AAGACTAAT AGAAGTGAAA AATACCACTG AAATGTTGGT GTACAAATGG CAGCTAATT TGATTACAC TAGATTTTAC  
 ACATTTGTGT CTATTTCAA TAGGTACTTT TACATTTTCC TTAAGTGCAT CTGACACAGA GTGAATCACA GATATATGTT  
 GGTGTCGAAA GCAGAGGTTA CTATTATTAA NCGAAAATTT TTGTGGTTTT GCAGTCATCA TATCTAATGT GGTACAGAT  
 TGTG

SEQ ID NO:2312: (Length of Sequence = 362 Nucleotides)

GNAGTTTATA AAGCTTTATT AAACATTTCA AACAGCTGTG CAACGAACAC ACCAAATAAA AGCTCTAGAA TAGCAGTCCA  
 GACGTTTCAC AAGTATGGCC TCACAGTCCC ATTCCCTAGA TGGACTGCCT CCAGTNCCTG NCTCTGCCCTG GCCCATCTCT  
 CTTTCCCCCTC AGGCAAGAGA GAGATGGATG GNTCAGACTG AAAGGACAGG CATGCTGATC TCCAGCAGGC AGGGGCCAGG  
 AGAAAGTCTC GTTGGCCAAC ACTTGTTACT GAAGCGCAGA AAAAGCAGCA AGTGACAGTC ACAAAGTCTT CCTGGGGTAT  
 TCTTCATAAC GTACAGTCTA TATGCGCAGG AACGAGGAAG CT

SEQ ID NO:2313: (Length of Sequence = 449 Nucleotides)

TGTAATTTT AAATTAAGAC TGCCTTAGTG AGAAATTTT AGCAGGTGAG TTAAGGGCAC GAGGAAAGGG CCTTTGTGCA  
 GAAGTAATGA CATAGGCAA TTGTCAAAGG AGAGGTTCCT TGGTGTATTT NTAGAAGAAA GTAGACCCAT GTNCTGAAC  
 CCAGCACACA GTTCACTTAT GGTGGTTTTG AAATCTGCCC TGAATTTTNC ATGCATCTTT TAAATTTTGT GTTATTTTTT  
 NCAAGAAATA AATGAAGTCT TTATTTTINC AATGAGGCA ATGTTTATTA AGAACAGCAC ATAAGGTAGA AAAGAAGTT  
 GGTTCCTAAT CTGGTTCAT CTCCCCACT GATCTTGAGT TTTAAAGCA TAGAGAGCAC GATCCTTCTG TGGGGTCTCC  
 ACTGTCAGAG AGCCTGTNCA GATGAGCAGT CACACTGTTA CTCCACAGC

SEQ ID NO:2314: (Length of Sequence = 316 Nucleotides)

CGAGGCAAAC ACAAGGGCT CTTCTGCTT CTCTGACCCC ACCTGCAGCA GGTAGTGGAT AACAGCCCCCT ATGGCCTCCT  
 TCATGACGCT CACGAGCTGC ACCTTCTGTG GTCCTTAAG CAGTGACTGC TCACAGCGAG TGCAATCCTG GNTCCCCAAC  
 TCCATGAGGG CATAGCAGGC GGTCAACACA TCCTCTTTCA CCTCGTGCC CGTNTCTCC AGTGCCAGCC GCACCTCCAC  
 GNACGNCAGA TTCACCAGA GGGCCAGGAA CTGTCTCCC GAGCTGCCCC CCGGGATCCA GTCGGAGCCG CAGGTG

SEQ ID NO:2315: (Length of Sequence = 286 Nucleotides)

ATTTTTATGT GTAGACAGGC TGTGGGTTC CTTCACTTAA ATTGAAGCTC TGTGAACTT GAGACACTTA AGANTCTTGC  
 AAGTNTGAAA AGTGGAGTGA AACAAAACCA TTTCTAAAC GAAATGTGT AACTNCNTT AGTTTTACAC AGTGNAGAAA  
 TAAGTATTAA ACAAGTAGT CTCAAACGGT TATATCTTAA GTTCATTTTA TTCTGTAT CATTAAGTAG ACATATCTTG  
 GTTTAGAGAG CAGCACACAA GACATTGTGT ACTNTTAAAT AGCTAA

SEQ ID NO:2316: (Length of Sequence = 414 Nucleotides)

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AATCATAGCT TACTGTGGCC TCGATGTCCT GAGCTCAGGC GATCCTCTCC TTATAGCCTC CAGAGTAGCT GGGACTATAG  
 GTGCGTGCCA CCACACCCTG CTAATTINAT GTTTTGAAGA GACCGGGTCT CACTTTGTG CCCAGGCTGG TGTCAGACTC  
 CTGGGCTCAA GCTAAATCAC CCACCTTGGC TTCCCAAAGT GTGGGGAATTA CAGGTGTGAG CCACTGCGCC CAGCTCTGAT  
 TTTTGTATTT CTACTTAAG GCGACATACT TAGTAGCTGT GCGTCTTGGG GCAGATACCT CCCAAAGCCC CAGTTCGTG  
 ATCTATAAAT AATGTAACAA CAGGGCCCCG CTCGCAGGGT TGCTGTGTGC ACATATGTGT GTGTACGTAC CCATGTGCCT  
 NTACGAGAAG GGCT

SEQ ID NO:2317: (Length of Sequence = 166 Nucleotides)

GCAGTACTA TTATTAACAT TACAGTACCA AGCATCCGCA AGAGACAGTC ATTTGINATT TTTNATCAAG AAATAGGGCT  
 GTTTTATACT GTTATTGACA TCAACTTTTT CCCAGTGCAT TTTTCAAAA TATTAATAAG TTCAATCCCT TGTCCTTTTA  
 ACTTCC

SEQ ID NO:2318: (Length of Sequence = 374 Nucleotides)

TTTATTTTAC ACTTACAAAA GAAATCGCCC ACCCCTTTGC CCCATTCCCC CAAACAGTC TCTTTTTACA AACATTTAAA  
 AATTAAAACC AAATGAAGAT AGACAAGTTA ATTTCACTAC AATTATTTIN CAGTGTAGCT GTCAATAATTA GAGTTTAAAT  
 TTCTTACAAG TGACCAATGT CCAAGTGAAT TATAGGAAA TCCTGATTAT CGGCCAAAGG AAATTCAATA TTACAAGTTA  
 GCAAATTCCT AGTACAAAA TAGTCCGTGT GTTGGAAAT 743 CTTTTCCTTG TTACATAGGT CTTAGGTCAG TCTGCTGTNA  
 ATACCTTAAC GNTTCCGGAT TCINNTCTCA CAAATG : AATCGTCACT GCTG

SEQ ID NO:2319: (Length of Sequence = 180 Nucleotides)

CATCTTAGTT CATGGTAATC TCCTTGGCAG CACTTATTGT CTTTGTGTGA GAGCAAATGA TAGAGTCATC CATTCAAGTT  
 AATTAAAGAG ATCTGCATTG CAAACTGGT CACTAAATG CTCGCCAAT TTGAGGCTTT TTCTCTGCCA ACACAAATTA  
 ATTTTTTAAG TAGCAGCATT TTCAGGAGAG ACCAAATAAA GAAAGCAACA ATAAAGTTGC CTGTCTAGTG AGATGTCCCC  
 AACTATCAA CTTTAAACAT ACCTTTGCCT TTNATAGTAG TTCTTCACAC AACTGCCTT AATCAAAATG CGTGTCTCTT  
 GCTCTGTCTT TTTATGTTTT GGCTCTTTAG CAACCTAATT GTATGGTTAG ACAGATTCCT

SEQ ID NO:2320: (Length of Sequence = 348 Nucleotides)

GGAGTTCTCT TGTCCACGGA GAGCAGTGTG CAGTGTATG GAATGCTAAA TCTTACCCCA AAGGGCAAGC AGGCTCCAGG  
 TGGCCATGAG CTGAGTTGTG ACTTCTGGGA ACTAATTTGG TTGGCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG  
 AGTCTGACGT TGATGTCCAG CTCAACAACA GACACATGAT GATCCNAGGA GAAAACATGT CCAAATCCT AAAAGCACGA  
 TCCATGGTCA CCAGGTGCTT TAGAGATCAC TTCTTTNATA GGGGGTACT ATGAAGTTAC TTCTCCAAC ATTAGTGCAA  
 ACACAAAGTA NGAAGGTGGT GCCACT

SEQ ID NO:2321: (Length of Sequence = 330 Nucleotides)

ATCTAGACTT TNAGTTCCCT GCATCTGCCA CGTAGTTTC TAGCAGGAGT AGTGGGGGGA GTAATACAGA TTCTNCCCTA  
 GAAGGGGACA CTGGTAACAT GTCCCACTCT TGGATTAGCA GGGGTGGGTC CAGGAAGATG ATATTNCTNT CTTTGGCCCA  
 CCCCCCTGGC ATTCACTGAG ACCCACTAG GCCATCATGA GTGGCTTCTC CTTGTCTATC CCAGGGGTCA TAGGATATCT  
 ACACCGCCTT TINTGACCCCA CCCTGCACTC CCATCCTTTC CTCTCTCCCC GGTTCATGCC CTGCACTACA TAGCACAGCC  
 GGGATGCTTN

SEQ ID NO:2322: (Length of Sequence = 352 Nucleotides)

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TTGACAAGTA AGTGTATATA TTTAAGGTGT ACAATGTGAT GCTTTGATAC ATACAGTGTG AAATGATTAC CACAGTTAGG  
 TTTAATAATT AACATATCCA TCATCTCACA TAGGTATGAT TTCTTATGTG TGTGGGAGAG ATCCTGAAAA TCAACTCTGA  
 GCACATTCA AGTGTACAAT ACAGTATTTA TGATAGTCAC CATGCTGTGA ATCAGATTGC CTACCTTGGT TAAAGTGCAG  
 ACTCAGGTGA AGGTCTGGAT GGAGGATCAT ACTTTAATTG ATTTAGACTC TAAAATAAAT GTATATAGTT ATTTTGTCTA  
 ACCTAANGAA CCTACTCATA AATGGGCTAG TG

SEQ ID NO:2323: (Length of Sequence = 316 Nucleotides)

GAGACAGAGT CTCTCTCTGT CGCCCGGGCT GGAGTGCAGT GGCACAACTC AGCTCACTGC AACCTCCGCC TCCCAGATGT  
 CCAAGTGATC AAGGGGTTC ATTTGCTCTT GGGGATTAG GTATCATTTG GGGAGGAAGC ATGTGTTCTG TGAGGTGTGT  
 CGGCTATGTC CAAGTGTCTT TACTAATAG TGGAGACGGG GTTTCACCAT GTTGGCCAGG CAGGACCTCA GGTGATCTGC  
 CCACCTCAGC CTCCCGAAGT GCTGGGATTA CAGGCATGAG TCACCACACC CGCTTCATT TATTTTCTTA TCCATG

SEQ ID NO:2324: (Length of Sequence = 300 Nucleotides)

GGGGACAGGA GGTGACCTCG CGAGCAGCG CGCGNCCAN ACAAGCAAGC CGCCCGGCG CTCTCGGGAG CCGTGGGGCA  
 GAGGCTGCGG ANCCAGGAG GGCCGGAGCC CTCATGANIT CANINACCTG CTCTCCCCC TTAGGTCTA TCAGCCACAG  
 TTTCTGCAAG TTTCCAAGAG CAGCAGAAAA TGAACACATT NCAGGGGCCA GTTTCATTCA AAGATGTGGC TGTGGATTTC  
 ACCCAGGNGG AGTGGCAGCA ACTGGACCTT GATGAGAAGA TAGCATACGG GGATGTGATG

SEQ ID NO:2325: (Length of Sequence = 303 Nucleotides)

CTGTCTCAAA TAATAATGAT AATATTINCT TATGCTTACT TTACTGTAAG ATTACAGTAT ACATTACAAC ATATGCGTTT  
 ATTGACTGTT TATGTTATTG ATAAGGCTTC TAGTCAACAG TAGGTTACTA GTAAITAAAT TTTTGAGGAG TCAAAAGTTA  
 TGTGTGGATT TTCAACTGTG GACTTTGGTG CCTCTAACCC TGTGTGTTTC AGGGGTCAAC TGTGTATTCT TTCTGTGGNA  
 ACATTTTITAG ATGTTATAGC CTTTAGACAT TAGAAATGGA AATTTAGTTG AACTCGNGTG TTC

SEQ ID NO:2326: (Length of Sequence = 348 Nucleotides)

GTGTGCTCG TGTGGCAGAT GACACAATCT CTCCCGTCCC TGGAGGCCAG CTCCCGCGTG GCCAACCTCA GGCTCCCAT  
 GGCATCTCAG GGCTCTCCA GCCAGACTGG CGCCATCCAA TTAACCTGAT GGTGGCTGAG CAGCTCAGCT CTGTGCCAGC  
 CCTGCGAGGA GGCAGATCAT GTTGTCCAGG CCCAGAGGT AGCCGTCTC ACGGTTGCCN TCAGCCAGG GCAGCCTGTG  
 GCTGAGCGTC TGGTGGTCGG GCAAGGCCAC CGTCTTGGCG AAGTCTATCA TCCAGACCTT GGCCAGGCCG GTGTGTCGT  
 GCACGAAGAG GAGGGAGCTT CCTACCAC

SEQ ID NO:2327: (Length of Sequence = 392 Nucleotides)

AGCTGTTTTT TCCTAGCTGC CAAGACTGTT GAGGAAGATG AGAGAATTCC AGTACTAAAG GTATTGGCAA GAGACAGTTT  
 CTGTGGATGT TCCTCATCTG AAATTTTGAG AATGGAGAGA ATTATTCTGG ATAAGTGA TGGGATCTT CACACAGCCA  
 CACCATGGA TTTCTTCAT ATTTCCATG CCATGTCAGT GTCAACTAGG CCTCAGTTAC TTTTCAGTTT GCCCAAATTG  
 AGCCCATCTC AACATTTGGC AGTCTTACC ANGCAACTAC TTCATGTAT GGCTGCAAC CAATTCTGC AATTCAGAGG  
 ATCCATGCTT GCTCTGGCCA TGGTTAGTCT GGAAATGGAG GAAACTCATT CCTGATTGGC TTTCTCTTAC AA

SEQ ID NO:2328: (Length of Sequence = 256 Nucleotides)

ACGAGCACAC TCTTCACAGT GGGCGGAAC ATCAGAAAAT GGGAGCCTTC TTCTAATGGC TGTNCTTTTC TGTGGGAAA  
 AAAAAAAG AAATCCTCCA AACCACACG GATGGTTGTA AAAAGCTGCA ACGGAACCTT TGGCACCNGA TGAGAAGAGA

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GGCCTTTTAA TGCCATAGCT AGTGATGATT CANTCAAAGC ATCAGTCTAA GGAAGGATGA TGGGGGAAGG GACCNAGAT  
CACAGNCCTT CTCCTT

SEQ ID NO:2329: (Length of Sequence = 383 Nucleotides)

AGTAGAGACA GCATTTCATT ATGTTGGCCA GGCTGGTCTC GAACTCCTCA CCTCAAGTGA TCTGCCTGCC TCGGCCTCCC  
AAAGTGGGGG GATTACAGGC GTGAGCACNC ATGCCTGGCC TTTTTTTTTT TTTTTTTTAA CGAAGTTATT TTTCTAGAGC  
ATTCATAGTT TGTTTTATA CAGTTAAGGT TCTCATCCAT CTGGATTTTT TGGTAAGTGT GGGGAGAATA AAATGAGGAG  
CCNCTGTTTT TTTCTCCAAA TGGCATGTAT TGTCCCAACA CAATTTATTG AATCAATAAT TCATCTCTCC CATACGAATT  
TAAACTATTG AACTTTCACA TCAAAATTTT GGAACITACAA AGTAGGTTTA ACAAGGTGAG AAC

SEQ ID NO:2330: (Length of Sequence = 392 Nucleotides)

CGAAACGNTC TCAACCTATT CTCAACTTT AAATGGGTAA GAAGCCCACT GGTCAGCATG GCAAAGCCCC AGCTCTAATA  
AAAAATGCAA AAAATTGGCT GGGAGTGGAG GCGGGCGCCT GTAATCCCAG CTACTTGGAA GGTITGAGCTG GGAGAGTTGC  
TTGAGTCTGG GAGGCAGAGG TTGCAGTGAG CCGAGATCAC ACCACTGCAC TCCACCTTGA GCAACAGACT GAGACTCTGT  
CTCAAAAAAA AAAAAAANT TATGCAAAGT GTCTTTTCCA ACAAAGTGT AATGAAGCTA GAAGTCAATA ACAGGAAAAC  
CTGGGNGAAT TTGCAAGTAA GTGAAAGTTA AACAACATTC TTAACCAGTG GCTCAAAGGA GGAAATGACT GG

SEQ ID NO:2331: (Length of Sequence = 284 Nucleotides)

AAGAAAAGTA AATTCATCTT GTCACAGTC CTTTCTGGAA GAGTTTAGAA AGCAAAGAAT TCACGACTC AGCAGGAAGC  
AGAACGAGCT GTTCTTCTT TTGACACGCA CAAGCTAATC CCCTAGAGAG TGGGGATGTG GGAAACGGAG GGTAAATTAAT  
TCTTTGGTCA CTGGTTCACT GCTGAATAGC CTGGTTCAGT TTTGGCTCTC TCCTATTTTA GGGGGAAAAA TATTTTNGTT  
TCITTTTTTTT AAAAAATAAA ATGTTGCGAC AATGGGAGAA AATT

SEQ ID NO:2332: (Length of Sequence = 349 Nucleotides)

ATCTTAAAAA GATTTTTTGT ATTINCITTT GAGACTGGGT CTCAGTCTGT TGCCAGGCT GGAGTGTAGC AGCCTGATCA  
TGGCTCAGTG CAGCCTCTAC CTCCCCGGGC TCAGGTGATC CTCCCCCTTC AGCCTCCTGA GTAGCTGGGA CTACAGAGGT  
GTGGCACCAT GCGCGCTAA TTTTGTATT TTTTGTGAG ATGGGGTTTT GCCATGTTGC CCAGGCTAGT CTGAACTCC  
TGGATGTGAG CCACTGCGTC TGGCCTATTA TTTTAAATAT AGTTCTCTTT ACTGCCAGTA GCTTTCATAT AACCTTAGCG  
ACTAGATTTA GTCACCACTG CTTAATTCC

SEQ ID NO:2333: (Length of Sequence = 353 Nucleotides)

CCACCTCTCC GTTCTCTGCT TCINAACCAC AGCGCATCC TATTTGCAGC CCTCAAGATT AAGGATGAAA ATTTGACTTT  
TTAATTTTAT TATTCITGTT CTTCCTTCCT ACTTCATTAG AATCATGTTA TTGGCCTAAA ATACTGTATG TAAAGGATGC  
TCTGGGGCCC ATCTGGAAGC CTGCATCTC TGGGGATATA ATTACGCTAA GCAATTTTTT ACCAGGGACA GCATGACTTA  
GCTTCTACCT GGGCATCTC TGGCAACACA GCGCTCAGTT CTTCCAAAGG GATTGGCTGC TGTCCCTTCA GGCCTCTCTC  
TTNGTGTGT GTGTGTGTGT GTGTGTGTGA TTC

SEQ ID NO:2334: (Length of Sequence = 279 Nucleotides)

GCGCCTCTA CNAGCTGCTG CTGCGCNCCT CATNCTGGTG GCGATGCTGC AGCTGCTCTA CCTGTGCTG CTGTCCGGAC  
TGCACGGGCA GGAGGAGCAA GACCAATATT TTAAGTTCTT TCCCCGCTC CCACGGTCCG TGGACCAGGT CAAGGCGCAG  
TCCGNACCGC GCTGGCCTCT GGAGCGCTC TNGACGCTAG CGGCGATTAC CGCNTCTACA GGGGCCTGCT GAAGACCACC  
AINGACCCCA ACNATGTGAT CCTGGCCACG NACGCCAGC

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SEQ ID NO:2335: (Length of Sequence = 386 Nucleotides)

GCCTTTTGT CATGGTAGCA AAGTGGCTGC TGTGGCTCCA GGCATCACAC CCTCAATCAA GGTAGGAAGA AGAGGCCAG  
 GGAGGTGTTA GCCATGCCTG TTTCTTTTAT TGGAAAAGCT TTCCAGAAAG CCCAGGTAGA CTTCCTCTTC AATTTCATTG  
 GCCACACCTG ATCAGATAGC CATCCTAAGC TGCAAAGGAG ACTGGAACAG TGAAAATCTG GATTTACAGC CTCCACAGTT  
 GGAGTGGCTG GAGATACAGA GTTGGGACGA CCCCTGAAAA GTGAACCAAG GTGCTCTGCA CGGCTGCCCT GGAGGGCGTG  
 GTGCTTGAGG TCCCTTCTAC CTCTGGGGCT TCATGGAATG ACTTGTGTC TCCATGGAGC ACCTCT

SEQ ID NO:2336: (Length of Sequence = 258 Nucleotides)

CCCTAGCAAA CCACTGATGA CCGCTGGA GGGGCCAGCC TGTGGTGTCT CTGGGCCTTG CAGCTNTTTC TNTAGGGTTA  
 GCGGTGGTGC CGGGTCACT TTCTGAATCT TTTTTTTTTT TTTTCAAAAA GGAAAGTTTT TAATGGAAAG TTGAGCCAGA  
 ACTAAACCAG GGAGCTGTCT GAAATCATAG CACCCCATCC GGGTGGCGGG GAGATCAACT CCGAGCTGTT TTTCCGAGGC  
 AGTGAGGAAC GGTGCCGG

SEQ ID NO:2337: (Length of Sequence = 338 Nucleotides)

ATCTCTTTTC CCACITCATA AAAGCAAAAT ATGTAAGACT AGCATCTGGT TTTTGTCCCA ATAAAAAAT CCCACAACCT  
 TCAAGATATC ACTCTAGCTT TCTAAAGTAG AAAGGCAATT CAGGCAACAA AAAATATTTT TTAAAAATCT ATAGCCCAAA  
 TCACCAAAAG GTAAGGAAAG AACITTCCTA GCAAGCTCTG GAGAAGACCT AATTTGNGCA TCAAAATGGA GCTTTCAGAC  
 ACTAATCAAG GCCATTAATT AAAAAAATTT TTTCAGGAAA ATAAGGCAGG TTGGATCTCT TTTCCCACTT CATAAAGCA  
 AAATATGTGG CAGACTCT

SEQ ID NO:2338: (Length of Sequence = 410 Nucleotides)

GGGCTGTGCT ATGCTGCCTA GGCTGGTCTT GAACTCTTCA ACTGCAGTCT TGACCTCCCA GGCTCAAGTG ATCTTCTTAC  
 ATAGGCCTCC CAATGTGCCA GGATTATAGG CATGACCACC ATGCCAAGCT CCAGATGGTA TTCTTAATTC AGCTCACAAT  
 GTGCCCTCAT CAGATTGCTA GTGGCCAGGA GTGAACAACCT GAGTGACTTT AAGAATCAGG ACACCAGGAA TATGTTCTTA  
 GAAAGTGAAG GTATGAGTGG AAAACCTGGG TTGGATTATG AACAGGCCCC ACATGTGTGC CAGAGTGGCC AGGGCAGGGA  
 GCAGCAGCAG GTGCTGGTGA AAGGAAGGTG GATTACTGGG GGCAATGCCT GTCTTTGTGT TATGGGTTTC TTTTGAGGGA  
 AGTAGATAAG

SEQ ID NO:2339: (Length of Sequence = 336 Nucleotides)

AGGGGAGGAG GGGGCTAAGG GCGGCTGGAG GAAGAGCGAA ANAGATGGAA GCCTTCCGGC AGAAGGCAGA GCTGGGGCGT  
 TTNTTGAGAC ATCAGTATAA CGCTCAACTC AGCAGACGCA CACAGCAGAT CCAAGAGGAG CTGGAGGCAG ACAGGCGGNT  
 CCTGCAGGCC CTCTCGAGA AGGAGGACGA GAGCCAGCGC CTCCACCTGG CCAGGCGGGA GCAGGTCATG GCCGATNTGG  
 CCTGNTGAA GCAGGCCAAT NAGGNGCAGC TTCAGCTGGA GCGGGCGCGG GAGGCAGAGC TGCAGATGCT TCTTGAGGGA  
 GGAGGGCCAA GGAGAT

SEQ ID NO:2340: (Length of Sequence = 290 Nucleotides)

TTTTAGTAGA GATGGGGGTT TCTCTTGT GTTCAGGCTG GTCTGAACT CCGACCTCA GGTGATCCAC CTGCCTCGGC  
 CTCCCAAAGT GTTGGGATTA CAGGCGTGAG CACNGCGNC CGGCTTCAG TTTCTTCTTA GGCCGTTCTG TCACCCAAAT  
 AGCTGCTACC CAGAGNGCG GGGTGTACCT AGGCTGAATA TCCACTTTGT TTTTATGGAT GGCTNCCTTC CCCCATTCGN  
 CTTTNCAGA ATATCCTTTC AAGTINCANT TTCCAGGGG AGCTCTTGGG

SEQ ID NO:2341: (Length of Sequence = 298 Nucleotides)

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TTTGTCTTAT TACCCGATTT ATTAGAGAGA TCTCTAAAAA GACGGGGTGT GCGGGGGTA GGTGGGCGAG GAACCTGGGA  
 TGCAAACAG TGTGTGGGGC CAGGAGTGGC TGTATGGTTT CANAGGCGCC CACCACTCTG GGTGTGAGGG ACACAGCACC  
 CTGCTCTCGG CGCTTTGGAT TATCAGCAC CAGACCACGG GCGGGAGGAA TGGAGTGGCA TCCCTGGGGG GAGTTAAGAC  
 ACACGAGGTT TGCAGTTTCA TTTTGTTC AATCAGTTT GGCCATAAAA ATGGGACT

SEQ ID NO:2342: (Length of Sequence = 316 Nucleotides)

CCTGAACAAG GTCGTGGTGG TGTGGAATTC TCCCAAGCTG CCATCAGAGG ACCTTCTGTG GCCTGACATT GGCGTCCCCA  
 TCATGGTGGT CCGTACTGAG AAGAACAGTT TNAACAACCG ATTCTTACCC TGGAAATGAAA TTGAGACAGA GGCCATCCTG  
 TCCATTGATG ACGATGCTCA CCTCCGCCAT GACGAAATCA TGTTTGGGTT CCGGGTGTGG AGAGAAGCTC GGGACNCAT  
 CGTGGGCTTC CCTGGNCGTT ACCACGCATG GGACATCCCC CATCAGTCTT GGTCTACAA CTCCAACCTAC TCCTGT

SEQ ID NO:2343: (Length of Sequence = 380 Nucleotides)

GGAAGAGGAG GAAGGTTGGA CCTTCATCAG ACCACTCCCT TCCCCATCC TCCAGGAGAG GGGCAAGGG CAACCCACCA  
 TCTACCCACT TACTAACCTG GTCCIAACCC CTTTACTGTG CGGTGTGTG TCGTGTGCG CACGCTCTGG CTGTTTGTCT  
 ATATGTCTAG CTCATCTAGT TCCTCTTCTT AAGGGATGG GGGTCAGGG CTAGGGGAGG GGGCTGAGTT TCCCCACTTT  
 AGGAGGAGGT GGGGGCTATT TCTATGCAAA TAGAAATCAG CACATTCTCT CTACTTCCCT TTCTTCCACT CCCCCATAT  
 CTTTAAAGTG TGAAGCAGA AAAGGACCTG CATTTTCTCT ACAATTGAGG AGCTGACATA

SEQ ID NO:2344: (Length of Sequence = 282 Nucleotides)

GGGAATATAT TTATGCAAT TTTATTGAAA TTTATTGTAA ATAAAGNITT TNCAGTGGN CTAGAAAANC AGCTTGAATG  
 NCATTTCAGCA TTTATTGAAG AAGGATGACA TCCCTNCCAC TTATTGCACA AACTTGGTAG CTTTGAGACA AATACAGTAG  
 CACAGTCCGT TTGAAGATTT GTCCAAAAAA TTAGTCCATA TTTTAGTGGC TCAGTGTCAA GNGTTCCCTC CTTGTGCCCC  
 CACTGTGCT TCTGCAGTGA TACGAAGGAT GAATGCTTAA TT

SEQ ID NO:2345: (Length of Sequence = 256 Nucleotides)

CTTTATAGGA AGCTGCAAAA GAAATGAGCA GAGCGNGATA TTTGTGGTAA GGGATACAAA GAACATACAA TTGTGTACTT  
 GAGAGGTTTC ATGGAACATT ATGACCCATC CAATGNAGAC ATCAACATTA ACAACAAAAA TTANTTGAGG AAGAGCAGTA  
 TGAAAATATT CTAATGCACT GCTGTCCAAC AGAAGTTTCT GTGGTGATGG AAATGTTCCA TATCTTTGTG CTAATACAGA  
 ATCTACCAGC CACATG

SEQ ID NO:2346: (Length of Sequence = 437 Nucleotides)

GTGGAGATTG ATGCTTCINT TTTTGTGTG CGCTGCTGCC CTGCGCTGG GAGCCGAGCC GGAGGGAAGG CGGTGGAGAG  
 ATGATTGCAG AGTTGGTGAG CAGCGCTCTG GGGCTGGCCT TGTATCTCAA CACCCTGAGT GCGGATTTCT GCTATGATGA  
 CAGCGTGCT ATCAAGACTA ATCAGGACCT TCTCCAGAA ACTCCATGGA CGCACATTTT CTACAATNAT TTTTGGGGGA  
 CTCTTCTAAC CCACAGTGGC AGCCACAAGT CCTACGGGCC ACTCTGCACT CTTTCTTTT GCTGAACCA TGCCATTGGA  
 GGGTTGAATC CCTGGGAGCT ACCATCTTGT CAATGTCTG TTGCAATGCA GCAGTCACTG GTCTCTTCAC AAAGCTTCIN  
 CAAGATCCTC CTTTGGTGAT TGGATACTGG ACATTC

SEQ ID NO:2347: (Length of Sequence = 406 Nucleotides)

CCCGGCCGCC GCTTTCGCC GGGGCGAGAC CCCAGGTTT AAAATGAGCC TGTTTGGAAC AACCTCAGGT TTTGGAACCA  
 GTGGGACCAG CATGTTGGC AGTGCAACTA CAGACAATCA CAATCCCATG AAGGATATTG AAGTAACATC ATCTCCTGAT  
 GATAGCATTG GTTGTCTGTC TTTTAGCCCA CCAACCTTGC CGGGGAACCT TTTTATTGCA GGATCATGGG CTAATGATGT

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TOGCTGCTGG GAAGTTCAAG ACAGTGGACA GACCATTCCA AAAGCCCAGC AGATGCACAC TGGGCTGTG CTTGATGTCT  
GCTGGAGTTA CGATGGGAGC AAAGTGTITA CGGCATCGTG TGATAAACT GCCAAAATGT GGGGACCTCA GCAGTAACCA  
AGCGAT

SEQ ID NO:2348: (Length of Sequence = 363 Nucleotides)

GGCCTTTCAA GNAGCGGCG ANITCGCCGA CCGCTGTAA GAGGTACAGC AGATCCGCGA CCAGCACCCC AGCAAAATCC  
CGGTGATCAT CGAGCGCTAC AAGGGTGAGA AGCAGCTGCC CGTCTGGAC AAGACCAAGT TTTTGGTCCC GGACCATGTC  
AACATGAGCN AGTTGGTCAA GATCATCCGG CGCGTCTGC AGCTGAACCC CACGCAGGCC TTCTTCTGTC TGGTGAACCA  
GCACAGCATG GTGAGTNTNT CCACGCCCAT CGCGGACATC TACGAGCAGG AGAAAGACGA GGACGGCTTC CTCTATATGG  
TCTACGGCTC CCAGGAAACC TTOGGCTTTC TGAGNCAGCA GTA

SEQ ID NO:2349: (Length of Sequence = 332 Nucleotides)

TCTCTCTACT GATGTCTTTC AGTAGATTC GAAGTGATTG TGGCAAACAT AGTATCTTGA AGGAAGAGAT CGTGTTTTGA  
TTAGCATCTC CCGAGCCTAG TTTTGTGTTT ATGTTTCATGG TATTGAGGAA ATAAAGATCA ATTTGGACTT CTTGCACCTG  
TTAATACATC CTAGTCTCTG ACTGCAGCAA AATGACTCTC AGTGCCCCCT TCTCTTCTTA GTGATTGCCT AAGATGACAG  
CTTCATCTCC TTTTAATTAT TATCCACCTT CTTCCTCCATC TTCANTTGT TTCTCAAGTG AGGGACTTGG CCTCTACTGG  
GACTCCACTG GG

SEQ ID NO:2350: (Length of Sequence = 339 Nucleotides)

GAGATGGAGT CTCACCCCTT CGCCAGGCT GGAGTGCAAT GGCACGATCT CAGCTCACTG CAACCTCTTC CTCACAGGTT  
CAAGCAATTC TCCTGCCTCA GCCTCCGAG TAGCTGAGAC TACAGGGGTG TGCCACCATG ACCGGCCAAT TTTTGTACT  
TTTAGTAGAG ACAGGGTTTC ACCATGTTGG CCAGGCTCGC CCCGAAGTCC CGACCTCATG ATCCACCTGN CTCGGCCTCC  
CAAAGTCCCG GGACCACAGS CATGAGNCAC CGCACCAGA AAAAGCAAAT CTCTTAGTAT TTTTCTCTT GTCCAAAAGG  
TTCTGACCAT GTTCATGAC

SEQ ID NO:2351: (Length of Sequence = 354 Nucleotides)

AGAAGGACCT GAGTTGTGGC CAACAACAGG CTGCAGAAAG GCAATGCCAT CTTGAAGATT TCTCAACTAA GAGTCTGCAC  
CCATGACAGC CCACCGAGAC CCTCGCTCCA AGTTTGTGGA GAAAGGGAAC CCGCTTGGCA GCATGTGGAA AGACCCACG  
ATGAGCAGCA GACACAGCAA CGCTGCTCC TACATCTCGA CAGCATCTGT GTAAGACTCG CTAGCATCTG GTGCACACAC  
TGTATGAGAC AGCAACAGCC AGAACAGACA GCTTTACGTT GATGAACACA CAGACGGTGG CGCATGTTCA GAGATGCCGA  
GGGGACGCCG CAGTTCCCAA AATCACCTCT GGCC

SEQ ID NO:2352: (Length of Sequence = 378 Nucleotides)

GTGTTTGTGTT TAGTGAACA CTCAAATCAA AAACAGGCTC ACGTCTGAA TAGTCTCTG GTCTAAGCAA CTCAGCACCA  
GCGCGCCAA GGGGAGGCCG CCTTGTCTT GGCCCGGGA AGAGACGAG CTCCAGCCCC GACGCAGACC CCATGGCGCA  
CACAGGCAGG CAGAGCTCGA GGTNCAGGCG GCTGCCTTGC GGGAAAGTGC TGGGGAGGG TCCCTNGCTG AGGCTGCACC  
AAGGGCTNGG GAGAGGCCCA GGAAGGGGAG AGCGAGCTGN GAGCTTGGGA TGGGAGCGT GAGGTGGGGA TGGTTTNGCA  
GAGGGGCAGA GCCAAGNCA GAGGCAAGTT CTNGGCCCC ACAAGCTTAT GGTGGCA

SEQ ID NO:2353: (Length of Sequence = 369 Nucleotides)

CTGCCTTATA TAATGTGGAT GCTGGGCACA GAGCTGTCT CTTTGACCGA TTCCGTGGAG TGCAGGACAT TGTGGTAGGG  
GAAGGGACTC ATTTTCTCAT CCGTGGGTG CAGAAACCAA TTATCTTTGA CTGCCGTTCT CGACCACGTA ATGTGCCAGT



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CATCATTGGT AGCAAAGATT TACAGAATGT CAACATCACA CTGCGCATCC TCTTCGGGCC TGTCGCCAGC CAGCTTCCTC  
GCATCTTCAC CAGCATCCGA GAGGACTATG ATGAGCGTGT GCTGCCGTCC ATCACAACCTG AGATCCTCAA GTCAGTGGTG  
GCTCGCTTTC ATNCTGGAGA ACTAATCACC CAGAGAGAGC TGGTCTTCA

SEQ ID NO:2354: (Length of Sequence = 363 Nucleotides)

GGAGAGGGAT TGGCATGGC ACCATGGAGC TCCCAGGGCT TAGAGATGGA GCAAAGTTGG CCTCACCTTG GGGAAACCATT  
CCTGCTCCTG GATACTGGAA GACATTCTGC TGCATCTAG GATTGATTCC AGTGCCAAAC TGTCCTCCTA TGTTTCCTGT  
CATGCCCTCG CTCACCATGC TGTTCGGTT GGCCAAGGAT GCTTCAGGAT TTNCTGCTAG TTGTGAAAAC GGGCTGGTAG  
AAGCAGGTGG GGTTCCTGGG ATTGTACCA TAGTTTNGTG GATAGGGGAA TTGCTGTGGA GCACCCTGAG GAAGACGGGG  
GTINCCCAT TNAATGGTA GTCCAGATGA GGGAGGGAGG GTT

SEQ ID NO:2355: (Length of Sequence = 403 Nucleotides)

AACCAGGAAT GGAGGGCCTC CTCATGTCTG AGGTAGAGTA AGACGGTGT AGGGGGCGGA CCGGGGGCG GAGATGAGCA  
CCGGCCGCAC TGGGGCATCA TCNGGCCCA CCGGGGACGA TGGGCCGTGG GAGGGCTCAG GGCGGTGTGG TGGCCACACT  
GCGAAGAATG GATTMTTAAA ACACCTTCATA GCCCCGANIT TMTTCAGCT CCTCTTCGT GGACACAAC TACGGGCTCC  
CTGTCACTG GCTTTCGGGG GTGGTCTCCC CACTTGCGA GTCTGGTCTC CACAGGACAC CGTCTTCCC TTCCCTTCCA  
AGGGGCAGGN CCCACGNACC CTCGCCCAA AANTAAAGGA GCTTTGTGT TGAACAAGCC AAGGCAAGCC GTCCAAGGGA  
GCT

SEQ ID NO:2356: (Length of Sequence = 456 Nucleotides)

GAAAGAAAA CAATTGGTCA AACCACAAGA ACACGTGTAC CTGAGCCTG AGAAGCCAAT TCAGATTCAA CCTGAATTT  
GGTIGATTTG GATTAAGTGA CGCAAAAAGT CAATAGAACC ATTGANTTC AGAAATCATA AAGTGCACAT ATGCCAAAGA  
AAAGAGTACA TGTGAATCAA CGGTAGATAG AAAACATCAA GCCAAGAAAA CAACACANTT CACATAATTT TMTTCCCCC  
GACAAAACAT TTAAGCAGTT AATTTTGT TTGTTTTGTT TGTGTTT TGAAGAACAN TTGTTGTTT TTACATTTT  
TTGGTGGGAG AGCAAATTCT GATCAGCAT AGTGCTGTGA AATACTTTG GNTTATCATC CCCCAGTNT AGGGTGAGAT  
CATGAGGAAA NTTTTGGCAG TCCTTCTCTC AGATTINGTT CACTNAAANT GCTTGG

SEQ ID NO:2357: (Length of Sequence = 412 Nucleotides)

CCACCCCATG CCCAACAAGC CATATTGTCA ATAAATAAGG AATAACTGAA ACCAGACCCT TTAGGAAGAG ACAGAAATTC  
CATTACCCAG GAAACCACTC AGTGAAGATG CTGATAGTTC TGATATGTTT TTATGCCCTG CCCCCTTCCC CAAAAAACC  
ACCTGCAGAA CCAAATGTTT CTCCTCAAAG CCCATCAGCA CAGATTGATA ATAATATCAC TATCAAGCCA GGGCTAGTGC  
TTCTCTACAT ACTGTACTGT CACAGGTACA AAGCAAGCCC TGGACAGATA CTGTCTCCCT GCCCCACAA ATCCAGGGAG  
GAAAAAGACC AGGGANGCTT TGATTTCCTT GGGATTTAAA CCTCATGTTT AAAAAGGNTA ATAAAGGTGC TCGTACTTGT  
ATCTTCTTCC CT

SEQ ID NO:2358: (Length of Sequence = 399 Nucleotides)

AGATGGCAGC AGGTTCAAGT GGGGCCCTT GGATGCCTAA GCCTGGGGAC GACTACAGCT ACAATCAGTT TTCCACATAT  
GGCGATGCCA ATGCCGCTGG TGCTTATAT CAGGATTATT ACAGTGGTGG CTACTATCCT GCACAGGACC CGGCCCTGGT  
CCCCCCCCAG GAAATTGCCC CAGATGCCCT CTTCATCGAT GACGAAGCAT TTAAGCGGCT GCAGGGCAAG AGGAACCGAG  
GGAGAGAAGA AATCAACTTT GTGGAGATCA AAGGTGATGA CCAGCTCAGT GGGGCCAGC AATGGATGAC TAAGTCATTG  
ACAGAAGAGA AAACCATGAA GTCAATCAGC AAAAAGAAAG GTGAGCAGCC AACAGGCCAG CAGCGGGGGG AAACACCG

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SEQ ID NO:2359: (Length of Sequence = 352 Nucleotides)

CTTCATTAAAC AAGCTGCGAG AGAAGCTGGG TTGCCAGGAC GCCTTCCCCG AGGTGTACGA CAAGATCTGC AAGGCCGCCA  
 GGACTGAGCT GGAGCCCGCC TGGAGAGACA GACACGTGTG AGTGGTCAGG CATCTTCCCT TCACTCAAGC TTGGCTGCTT  
 TCCTAGATCC ACACTTTCAA AGAGAAACCC CTCCAGAACT CCCACCTGA CAGCCCAACA CCACCTTCCT CCTGGCTTCC  
 AGGGGGGCAG CCCAGTGGAA TGGAAAGAAT GTGGGATTG GAGTCAGACA AGCCTGAGTC CAGTTNCCCG TTTAGAACTC  
 ATTAGCTGTG TGAATCTGGG TGAGTCCCTT AA

SEQ ID NO:2360: (Length of Sequence = 359 Nucleotides)

TTTTTTTCAG CATAGTCAAT TTAGCTTTAT TGAGTAAGGC ATCCCAATCT CTGCTAAGAT TCTNCTAAAT GAACGGCTGA  
 TTTTCTGCC AAACATAGCA TTGGTCAAAG AGAAATCACC ACCTGGCCAC CCCATTCTGT CCCCTACAG GACACTAAGG  
 GTTCTTACAG ATAAAGGGAC GATGCATCA TGCCGAGAGA ACTAATCACA CCTGATTTCT CTGGGATCTA AANTAATGTC  
 AAATTTTGAT TCACTTTATG TAAAGAAAAA TCCTTTNTT TTNTGCAAA CCNCTTTCAA GANCAATGCT GCCCATCCCA  
 TGCAAGATGT TGTGTAAAG CCANCTCTG GTATACTAA

SEQ ID NO:2361: (Length of Sequence = 437 Nucleotides)

CTCCAGGATT CCAATCCAGT CCGAACTCAA CACGAGGGT GGCACCTACA GGCTGGGGTC AATCTGGAAG ACTGCCTGTT  
 GTATGGCCTG GCAACTAAAA AATGTTTTT ACATTTTAA ATGGTTAACA AAATTAAT AAGAGAATAT TTCATGACAT  
 CATCAAATTA CACGAAATGC AAATTTGAGC ATCTACAAAT ACAGTTTGAT TGGGACACAG CCACCTCAT CCGTTTGAG  
 GCIATCCCTG GCTGCTTACA GGTCCACAT AGTCCATAA GCCTGAGGAT ATTTACTATC TGGCCTTTTA CAGAAAAAGG  
 TCCCCAAACA CTAAATCTGA AATGTTTGC ATCAGAACCC CTTGTGGGGC TTGTTAGGAA TGCAGCTCCC TGGTCCACA  
 NCCAGTCTCT GGATTCACTA AGTCTGGAGC AGGGCCT

SEQ ID NO:2362: (Length of Sequence = 317 Nucleotides)

CTTCTCTGGA TGTCCTGGG CTGGACTGG CTAGAATCIT TCTCTGGACT NTGTCATGTA CAGTGNCTCC ATCCTGGAGG  
 CAAGAGAGTT GGGAGTGGCT CGAATCANAG CCGTGCCCAA GATATCCCTN CTGTTGCATC GTTTGAAGCT GACGCTCTGT  
 GTCINTACAC TGCTGCCACT GTTGINTCCT CGNTCTGCTT GCTGTTGCC CAGCCAGGN CCCGTCTGC CGTGACANCC  
 TTCATCTAC CTTTGAACC CCAAGGCCAA GTTGGTTCAA ACTGTTGGAG AACAGAGTTG GCCTGCATCT TGGAAAC

SEQ ID NO:2363: (Length of Sequence = 412 Nucleotides)

GTCAGAGINT TGATAGTTCT ACTGGGAGAC CACAAAATGA CATGGTCCAT CCTCTCCTT ATCCAAAGAT GCATGGTTAA  
 AATAATATAG ATTAGGAATC ATCGTTACCT CCAACAGTT AATCAATTC AAATTTTATG CCCAGACTGG TTTTAAAGA  
 CATTTTCTGC CAAAATTTT TGAAGTAAA CACATTAAAG GTAGGTGTGG AGAACGATTA ATGGATTCAT TTTTACTC  
 ACATCTGTTT TGGAAATATA TTTTATGCAA TAAAGCATAA ACTAACAGGT ATACTTATAA ATGTCIGGTT TTAGAAACAC  
 TAAAGATCT CCAATCTTAC GAGGCCTTAA TTTGAAACTC TGCTTTTATT TGCTGAACT AGTGGCTAAC CTGINTAGGC  
 ATCTCACGAG GG

SEQ ID NO:2364: (Length of Sequence = 334 Nucleotides)

GAAATGATTT AATATTAGGA AAGGCAAGIN CCTGAGACA TTTATTTAAG CTAATCTGTC CTGATTTTT GACTTTCAGA  
 TTCATTACAC CCAGCCACAT TAGCCTGCAC CATTAAAAAC ATTGATTCAA CCTCTCTTAT TGGCATAGAC AATACATCTG  
 CCTTGTTTAC TACTCTATCC TCAGCTTGGT ATTCTCTAG CACAGAAGAA TGGTCCAGTA GATATGCTGA AGAAATACCT  
 GAATGCATAA ATAAATAAGA AAATGAGAGA CTGAATGANT CAATTAATAC CTCAAGTGTT ACCCTNGATA AGGTTCAGTA  
 GAGGGGAGGT TCTA

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SEQ ID NO:2365: (Length of Sequence = 423 Nucleotides)

TTTTTTGCCA TTTAATAAGT ACITTTATGA TATTATATCA CACAGCACTT TACAGTATAC TCAAAGATAG CCTAAATTAT  
GAATTAAACA TGCAAATATT TNCITTTTCCA AAATGTGGAC AAAATGTCTT TTAGAGTGCT TTTGAACACT AGCCTTAGCT  
ACTAAGCATT CATGGGTTTG ATCTTTCTTG CGACATGACT TTAAGTAAGT TAACAAAAAA TGTAGCTGTA GACAGTAATT  
GTTTGATAAA TATGANCAGT TTTAAATGG CACTGAATTT ACATCTTTAA TCATTTTAAT AGGGCCATCC ACAGCCTCTC  
TTGTGTCTCT AATTCTCAAC CTCGGGGGTC TTTAAAGGCG TGGTAAAGGC TCAGAAAGTG NCCAGCTCCA TGTGGGGTCT  
CTGTAAGNNG TCTATGTCTT CAT

SEQ ID NO:2366: (Length of Sequence = 294 Nucleotides)

CCAGCCATAC ACATGCCTTT ATTTAGATCA GCTTTTTTCA AAATGCAGCC AAACCTATGA GTTGGACAGC CCAAAGTAAC  
CAGCCCTATT CCACTGAGTT AGTTTACCCC ACAGCAGTAG AACCCAGTGC TGGTTTGGTT CCTGGCCCAT GGTGGGACAG  
CGTGAAGGTG ATGGAGGGCT CTAGCACAAG GAGGTGCTGA GTGCCACCGG CAGGTGCTTC TGCAGACAGC CTAGAGCAAG  
GTAAGCAGGA GCACTCGNTT CAGAACCGAG GCGGCTCGGA CCAGAGGGCA GGCA

SEQ ID NO:2367: (Length of Sequence = 393 Nucleotides)

ACGGACAGAG CGAAGGGGAG AGGATGGTAG TGCTGACTT CCACGTTTTT GTCAGGGATG TGTTCAGCA TGTGGATTCC  
ATGCAGAAAG ACTACCCTGG GCTTCTGTC TTCTTCTGG GCCACTCCAT GGGAGGGGCC ATGCCATCC TCACGGCCGC  
AGAGAGGCGG GGCCACTTCG CCGGCATGGT ACTCATTTCG CCTCTGGTTC TTGCCAATCC TGAATCTGCA ACAACTTTCA  
AGGTCTTTCG TCGGAAAGTG CTCAACCTTG TGCTGCCAAA CTNTTCCCTC GGGCCCATCG ACTCCAGCGT GCTCTCTCGG  
AATAAGGACA GAGGTGACA TTTATAACTC AGACCCCTG ATCTTNCGG GGCANGGGCT NAAGGTGTGC TTT

SEQ ID NO:2368: (Length of Sequence = 187 Nucleotides)

GATCTTGAAG TTAAACCACT GTTGAAGTT TTGGTGGGGA AGACAATTNA GCAGTCTCTT CTGGANGTAA TGGAAGAAGA  
AGAGCTGGCT AACCTGCGGG CCAGTCAGCG TGAGTATGAA GAACTACGGA ATAGTGAACG TCCTGAAGTT CAACGACTTG  
NAGAGCAAGA NAGCCGACAC CCAGAAG

SEQ ID NO:2369: (Length of Sequence = 341 Nucleotides)

GTATCTTTAG TAGAGGCGGG GTTCCACCAT GTTGGCCAGG CTGGTCTCGT ACTCCTGACC TCAGGTGATC ACCTGCTTCC  
TCGGCCTCCC AAAATGCTGG GATTACAAGC GTGAGCCACC GCGCCTGGCA CCATCAGTTT TTGATCCTGA TACTTGCTCG  
TCCTCTTGGT TCTCCTCATC CCTAATTIAA CCTTGAACAC AAAATTCAAC AGGTTTTGGC ATATAGAATA AAGATTATCA  
GGCAAAGGCG CACTCTTGAC CTAATGATAT ATCTACATTT CATTTCTGTA TCTATCAGCA ATATTTAATT TGTCTAGAAA  
TGATGAGAAG TTTAGAGGAG G

SEQ ID NO:2370: (Length of Sequence = 337 Nucleotides)

AGATCAAGAT CTCTCCCAA ATGCCAGTAT GCAAAGGACA CTGGGGCAG CCTCTCAACA TTTTCTGCCT GACTGATATG  
CAGCTGATTT GTGGGATCTG TGCTACTCGT GGGGAGCACA CCAAACATGT CTCTGTCT ATTGAAGATG CCTATGCTCA  
GGAAAGGGAT GCCTTTGAGT CCCTCTTCCA GAGCTTTGAG ACCTGGCGTC GGGGAGATGC TCTTTCTCGC TTGGATACCT  
TGGAACTAG TAAGAGGAAA TCCCTACAGT TACTNGACTA AAGATTGAGA TAAAGTGAAG GAATTTTTTT GAGGAAGTTA  
CAACACACAC TTGGATC

SEQ ID NO:2371: (Length of Sequence = 320 Nucleotides)

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CGTGGCCGCA GAGGCAGCTG AGCATGAGGG ATGGAGCGTG CTGCTGTCTT GCAGGTGCCG TTAGCCCTGT TTTGCACTGG  
 TGGATTGATC TGCTCAGGCG CACAGGGAGA TGGCACAGCA GGACCCGCGG CCCAGCCTCG CTGAGGGCAT GCTCCCGCCT  
 CACCTCCAGA GGCTGTTGGG CGGAAGCGAG AGCTGCAGCA GTTGGGGCCA GONTGGGACT GGAGGCCAG GTGAATCTTG  
 TGGGGCAGGG GACGGAGCTN AGGCTGTCCG GCGCGGGGCC TCCCAACCA AAGGCCCTAG AACCTTAGGC CTTCAATCCT

SEQ ID NO:2372: (Length of Sequence = 326 Nucleotides)

AGGCCTGGCA TGCGGCGAAA AGTTCCTGGA GAAGGCTCC CCTCCCCAA AACACCGAG AAACGTGGGG ACCTCATTAT  
 TGAGTTTGAA GTGATCTTCC CCGAAGGAT TCCCCAGACA TCAAGAACCG TACTTGAGCA GGTTCCTCCA ATATAGCTAT  
 CTGAGCTCCC CAAGGACTGA CCAGGGACCT TTCCAGAGCT CAAGGATTTT TGGACCTTTC TACCAGTTGT GGACCATGAG  
 AGGGTGGGAG GGCCAGGGA GGGCTTTCTG ACTNCTGAAT GTTTTNCAGA GCATATATTA CAATCTTTCA AAGTCGCACA  
 CTAGGA

SEQ ID NO:2373: (Length of Sequence = 361 Nucleotides)

AGCAGAGCTG AGGGAAGCG TAGGATGGCT CCAGCTTCCG GTCAGTGGCT ACATGGTCAG TTCCATGATG GCGTTGACGA  
 TGTCACTGTG GTTGTTTCTC AGAGCCCGCA CGGCTTGGC CCTGGACACA TTGGCCTGCG CCATCACCAG CTCATGTCA  
 GGCAGTTCCA GCGCGCCTC GTCCACCTCT TCCTCCTCCT CCTCTTCTC TTCTTGCAC TCCAGCCTCA CCGGGGCGCT  
 GGGTGTCTGAC TCAGGGACCA AGGCTGAGGG CTCTGAGGGN ACCTTAAACT TCTCAGCTGC GGCTTTGTGC ACTTGCTGGG  
 ACAAGTCTCT CAATCTTGGN CTCGCCAAAG ACCACATAAG T

SEQ ID NO:2374: (Length of Sequence = 281 Nucleotides)

TGACTCTAGT CTGGCACTTA TTGATGACAT TGAGAGGCTG AAATATGAAA TTNCAGAGGT GATGACAGAG ATGACAATC  
 TAACTTCCGT AGAGGAGAGC AAAACGACTC AGAGGNACAA ACAGATAGCC ATGGGAAGAA AGAAATTCAA CATGNTCCC  
 AAAAAGGGAA TTCAGTTTCT AATAGAAAAT GACCTGCTAC AGAGTTCCCC AGAAGACGTC GCCCAGTTCC TTTATAAAGG  
 AGAAGGCCTA AATAAGACCG TCATTGGGGA CTACCTGNGG T

SEQ ID NO:2375: (Length of Sequence = 391 Nucleotides)

ATGTTTAGTG CTTCTTCAG GAGCTCTGGT AGGGCAGGTC TGGTGGTGAC AAAATCTCTC AGCATTGTCT TGTCTGAAA  
 GGATTTTATT TCTCCTTAC TTATGAAGCT CAGTTTGGCT GGATATGAAA TTCTGGGTG AAAATTCTTT TCTTTAAGAA  
 TGTGAATAT TGGCCCCAC TCTCTCTGG CTGTACAGT TTCTGCTGAA AGATCTGCTG TTAGTCTGAT GGGCTTCCCT  
 TTGTGAGTAA CCGACCTTT CTCTCTGGCT GCGCTTAACA TTTTNCCTT CATTTCAACT TTGGTGAATC TGACAATTGT  
 GTATCTTGGA GTTGCTGTTC TCGAGGAGGC AACCTTTGTG GCGTCTCTT GTAATTTCCC CGAATTGAA A

SEQ ID NO:2376: (Length of Sequence = 324 Nucleotides)

CCAGCCCTCC CTCAGCTGGG AACACAGCCA GGTGCCCTCA GACCCCTGNN TCTGCACAAG GGGGGCCTGC CCCCTCGCCC  
 CAGCTATATA CAGCAGACC CATCTGCTG GCGTGGACA AAAGCTGGGA GCTCTGTGC CCAGTCAGGA GCGCCTACAG  
 TCCACCAGCT GCGCGGCCG GTCCAGGGC CCACTGTGGT GCCAGCNAGT TTNTCAAAC CNAGGGCCCA GCGCCAGCTG  
 GNCCTNGCC AAGCCCCAGG CCTGTTGCT GGGATGGAGC CTCCACACTG AGGCTGGTAA AAGCTTGAAC TCAACAGCAG  
 CAAT

SEQ ID NO:2377: (Length of Sequence = 357 Nucleotides)

GTTTATGTTT TTATTTATGT ATTTTAACTG ACTTATTTGT GTATCCCACT AGAACAATAC ATTCAACAATA TACTTGAGA  
 ACTGTGCCTG GTGCGTCATG GGAGCAGAGA ACTTGTCAG TGAATAGTTG TTGAAGAAAG GAGTAAAAAT TCCCCAAAC

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CCTAAAGGCA TCCTTTTCGT AGTGTGTGTC CCATAGGTAT GGCTGCTGAG CACCAGGGCT GCTCACCATG CTCCCAAGAA  
GCAGAGTCAG GGAGGCAGAC AGCAGGGTTT ATTAAGGTGC ACACCCATGT CTGAGCCCCA GCTCTCTCCG NCTTCTGTGG  
GGAGGAAGCC CTCGGTCTT TCCGAGGAAC CTTCAA

SEQ ID NO:2378: (Length of Sequence = 454 Nucleotides)

GACGGGTCTT TCAATAGCAA GTTTTCACTT CATCGACAAC ATCACGAAGG TGSTAACAAA CAAATGCTTT ATCAGGCTGG  
ACTTCATTTC AAACCTCCCC AAAGCACAGA TCCATTACGC ACATTAAAG ATACCATCTA CCTTACTCAG GTGATGCAGG  
CCCAGTGTGT CAAAACAGAA ACTGAATTCT ACCGCCGTAG TCGCAGCGAG ATAGTGGATC AGCAAGGGCA CACGATGGGG  
GCACTTTATT GGCAGTTGAA TGACATCTGG CAAGCTCCIT CCTGGGGCTT CTCTTGAGTA CGGAGGGAAA GTGGAAAATG  
CTTCATTACT TTGCTCAGAA TTTCTTTGCT CCACTGTGTC CAGTAGGCTT TTGAGGAATG AAAACACGGT CTATATCTAT  
GGGTGTGTCA GATCTTCACT CGGATTATTC GATGACACTC AGTGTGAGGA GTCC

SEQ ID NO:2379: (Length of Sequence = 224 Nucleotides)

GGAAGAGACC TCACAGGTA TTAAANGTGT ATTTNTGGA CCTGGGCTTG GCTGGAATGC TCAGGGGTCC TGAAGATCCT  
ATTATAGCTT CCTTCTGTG AACCATTAAG AAAAGATGGC GANAGTCAAC ATAAC TAGAG ACCTCATCCG TAGNAGATCA  
AGGAGCGGGG TGCCCTTAGC TTINAGCGGC GCTACCATGT CACGTGNCCT TTTATCCGGC GGCT

SEQ ID NO:2380: (Length of Sequence = 274 Nucleotides)

AGGTTTGAAA TATCTTTTTC CAATAGATAA TCTTATTAC ATTAATACAG AATCATTITA CATTCCTAAA TCAGACACTA  
ATAGATGCTT TATTTTAGTG AATTATAAAG GAAAACAAA AGGAACTGT TGAGAAGTGT TCTTCATTAA CCNGTCTAAC  
GNCAGCCCGA AGATCCNGNA ACACATGGAA ACTGCGNCAT GCTNCCNGCA GAGGCTGGGG AATGGGGGTT CTGCTCTCAC  
TGAATGGTGG GGAACCTTCA ACTGCTTAGC CTGT

SEQ ID NO:2381: (Length of Sequence = 312 Nucleotides)

GCACAAACAG TTTTATTTGA TGANCCACAG TGAATAACAG GNTCAGAAGA CAGTGCAGAT ATTCTGAAGA AGGCACTGNG  
GGAGGTAAGG GGGTATCACA GCAGGCAGCC TCCTCTGNTT CINTCCAGT TCACAGATGA GTTCCAGGCA GGAAGTCTCT  
GCAGGTCACC CACGGCGGCC TCAGAGGGAC AATTINTTCC CTCTAGAAAG CCINTTCCAG TGTTCACTGG ATGNTTTGAG  
GACAGNICTG GGCAGAGGAG GTGACTCTGT GAAAGATGCT ATCTTAAGAT GGGGAGACTA GGCTGTGAGG AG

SEQ ID NO:2382: (Length of Sequence = 402 Nucleotides)

CTTAAACTAA CTTTGAAGCA AGTAATGTCA ACTTTGAGCA CTTTGTGTAG TTTTGAAAAA TCTTATTGTG TGCTGCACAG  
GTTAATAAAT TATCAATTG TAATTCAGCA TGTGTTGTCAG AGACACGGTC ACTGATTCAC ACCCAGTCCC TGCCACAGAC  
CGTCTCAGAC ACGCACAGTG GGCTGCTGC ATGATTACA CCCAGTCCCT GCCACAGACC GTCTCAGACA CGCACAGTGG  
GGCTGCTGCA TGGGTGTTAC CTGGCTTTTG GCTCCAGCT CACTCATAGC CATGTCCACA TGGGGGGCTT GCACACAGGA  
TCACTCACAT ATGTACATGT ACCCACCACA AACGTGCAAA GCTCCTTGCA CACATGCATG CACACAAACG TGGTACACAA  
GT

SEQ ID NO:2383: (Length of Sequence = 406 Nucleotides)

GACCCTTTTT ACTTAGCCCT CTGGGGTTTG CAACATGCTT TCTCTCTCAC CTTCTCATTG AATGAGAAAA AACAGCCCAG  
CCATTTTTTG CAAACAGCAA AGCACCAGAG TGATGATGGC TTTGCTCATC TCACTTGACT TTCACAGTAA CTCAGTTTGA  
TGTAGGCACT CCAGGCATTA TTATTTTCAT TTTACAGATG ATGCAACTGA GGCTCAGTGT GGTGAAACAT TTGGCTCATA  
GCCACACAGC TGATAAGCAT CAGGGACTTG GGACCTAGGN CTTACATTT CAAGTCAGCT GTATCTGTCC CCAAGCCCCA

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CCAGACTTCA TGTGAAGGTG GCTGCTCTG GGGTGATGGT GGCTGGAGAG GCAGACTTTG AGGCTGCCAT GCTCTTATTT  
TCAGAT

SEQ ID NO:2384: (Length of Sequence = 165 Nucleotides)

TTAAGACAAT AATGAAAGAT TCTGTACAAA GTTACCAAGT CTACAGGCTG AGCGAGCCAA GGGTAAGTGG GGCTGATCC  
TTGTGGACGA ATGTCNCCCG GAGAGCTGGC CTCACCTGGG GGAGGCACGT TGAAAAAGTA CACATTTTACA GGGCTCGGGA  
AAGGC

SEQ ID NO:2385: (Length of Sequence = 297 Nucleotides)

GGTTTINATT CATTCTCTTC TATTAACTTC TCTAAAGGAA ATTGGGCACC TGTAATCCCA GCACTTTTGGG AGGCTGAGGT  
GGGTGGGTCA CTTTINAGGTC AGGAGTTCAA GACCAACCTG GCCAGCATGG TGAAAACCCA TCTCTACTAA AAATACAAAA  
NTTAGCCAGG CTGGTGGTGT TCGCTGTAA TCCCAGCTAC TCAGGAGGCT GAGGCAGGAG AATTGTTTGA ACCTGGGAGG  
CGGNGGTTGC AGTGAGCTGA GATCGTGCCA CTGCATTCCA GCCCAGGGTG ACAGAGT

SEQ ID NO:2386: (Length of Sequence = 290 Nucleotides)

AAAAAATAAA GTGAATTTAT TGGTTCATGT AACTGGAAG TCTCATGAAA ATGTCAGCTT CAGGAGAAGC TTGACCCAGC  
AGCTTCATGA TGTATGGAAA TACCTGGGTT TTTTGTTTCT NCTCTGCTAC TGIGGTATCA GCTTTATTCC AAGTCTGGCT  
TCCTTTGTTG TTGCAAAATG CTTTGTGAGA AGAAGCCTGG GTCCATCTGT TAGGNTTAAG TTTACTCTGT ATGCTGTAGT  
AGTGGCTATG ACAAGATTAG GAAGTGTATT TTCTCTCC ATATTAAAG

SEQ ID NO:2387: (Length of Sequence = 356 Nucleotides)

GTCTCTGTGA TTGTACATG AAATGCACAT CCAAAACGGG TGACTTGGAA ACGACCTATT AGGTCACACG GAGTCCGGCC  
CCTGGGGGCA AAGCCTCATC GATGCCACG GGGGTGGCC AGCACTTTCC TTGGGCTGTG GCGTGTGCAC CCGGCTCTCC  
CAGCGGAGAG TCAGTCAACA CCCCAGGCC TTTAGCTCTC TGGCAGCAGC TCCAAAACG CACTTGAGGA ACCAATAATT  
CCTTGGGGGT TAATAGCTGT TCCCCAAGAA AAGGGTTCTG TGGGTCAAAT AAGTTTAGGA AAACATGGGT TAAAGAAGGT  
TTAGGCAAGA AGCTTTTCTA TAGGGCTTGT TCAGAG

SEQ ID NO:2388: (Length of Sequence = 226 Nucleotides)

ATTATTGGTA TAAAACTTA AGACGGCATT AGAATTCTTA AGAAAAGGTG TAAAATTAA AAAGATGTGC AAACAACAAA  
GAATGCCCGA CCTGAACCA GACCTAAAGC ACCTTCCANT TCCTCCACAC ATCATGCCCC AACACCATCC AGCCCAATCG  
GACACCAGGA CAGTGAGGGA CGGGTGGCTG TTCAGTGGGC AACAGATCTG GAAGGAAAGA TTTTCA

SEQ ID NO:2389: (Length of Sequence = 250 Nucleotides)

CCCAGCTAGG CCTTGGNATG GCTNCAGTGA GGAGAAATCC CGGGAAGTGT ATTGACACAA AGATTCTNAT TGCATTGTGA  
TTTTTNTATT AAAGTTTGCA TGGTTTCTAA TAAAGGATTC AAACATAAGT TTGTAGTGAA ATGGCCTGGN AGATTCCAAG  
GGCTTCTCTN GAAGGGGGAT TNGCTGCAN TGTAGATTIN CCTCTGAAGG AGGCTGGCCC CAAACTTGGN CCTCTCATG  
ACCCCTCTCT

SEQ ID NO:2390: (Length of Sequence = 371 Nucleotides)

CCTTTTCTG GAGAACGGG TCTCGCTATA TTGCCAGGC AGGTCTCGAA CTCCTGGGCT CAAGCTATCC TCCCGCCTCT  
NAGCCTCGT TTCCAGAAGG TCACCAAGTA ATATCTGCTT TTCATCAGTT GCAGTTAAGA TTTTNNITTC TTGAAATACT  
GGTTTTCAAA CAGATCAGAA TTACCTGGG AGCTTGTTA AAATATAAAT GCCCAAGGC CAGCTCCAGG ACATTCTGAC

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TCCATAGGTA TGTGGTAAGC CCAGGGAATC CAGGTAAGCT CAGGTAAGCC CAGGGTAAGC CAGGGAATTG TTAACAGGAA  
GCTGGTGGGT TTCTGGCACC TNGACANCGA CTGAATTCTA GGTAGCTTGC C

SEQ ID NO:2391: (Length of Sequence = 200 Nucleotides)

CAGTTCAGCA GGCTATGAAA TTTGTGGGC ATATAAANAA CTGGAACCTT CAACAGGGTG GTTTTGAAAC TAGNGCATT  
ACCAATAAAT GNCAAACCCA CAAGGACAGT GCATTGTGTC ACATAGANGA TCTGGAAAGT ACAGCTGTAA ACTATAATCN  
CCAGTCTCTG AGTTAGCACC TTCCACGNT AGTCTCTTAC

SEQ ID NO:2392: (Length of Sequence = 234 Nucleotides)

TCGCTGAGGT GTTGGTTTG GAATAGGGAA AAAGGTAAGA GACTAACGTG GAAAGGTGCT AACTCAGAGA CTGGAGATTA  
TAGTTTACAG CTGTACTTTC CAGATCTTCT ATGTGACACA ATGCACGTG CTGTGGGGT TGTCATTTAT TGGTTAATNC  
TCTAGTTTCA AAACCACCT GTTGAAAGT CCAGNTATT ATATGCCAA CAAATTCAT AGCCTGCTGA ACTG

SEQ ID NO:2393: (Length of Sequence = 337 Nucleotides)

TCCAGAGGCG GATTGAGAAG AAAGGAGATC CACATGAAAT GAAGATCACC TCTGCCTATC TACAGGACAT TGAGAATGCC  
TATAAGAAAA CCTTCTCC TGAGATGAGT GAAAAATGTG AGENTTACA GTATCTGCA AGGGAAGCTC AAGATTCAAA  
AAAGGTGGTA GAGGACATTG AATACCTGAA GTTCGATAAA GGGCCGTGGC TCAAGCAGGA CAATGCACT TTATACCACC  
TGGGATTACT GGTTCAGGAT AAGTTTGAGG TGCTGAATTA CACAAGCATT CCTATCTTN TNCGGAGT CACCATTGGA  
GCTCATCAGA CTGACCG

SEQ ID NO:2394: (Length of Sequence = 211 Nucleotides)

CAAATGTTTA TTTTATATAC AAAGAATTAT CATGGTTTN CATGAGTAG ATGCCCGGA TAATCCTCTG AAGGAAGAGC  
ATTTAGTCCA ACTTAATGAA ACCGATATCC TTGCGTACT GACGGAAACA CTGGCGGCAC ATATTGAGGC CATATTTCCG  
GATCANACCG TGCCGGTTG AACAGACAG ACAAGAGCGA GAACCTGCC C

SEQ ID NO:2395: (Length of Sequence = 335 Nucleotides)

CTGAAAGCTG TAACACCCTC AGGTAATAAC AAAAGGGATT TTTATTTTAC AGCTAAAGGG AAAATAGGTG GAGAAGTTAA  
AAAATAATGT CTGATCCTGT TCCTAAGTTC CAACTATAG CCAACTCTT GATGCTGCTC TTTTCTTGT AGGACCAACC  
GTCCAGTTT GCCTGGGACT TTCTATTTT TACAGAGTCC CAAATCCTAG GAAACTGGAG CAACTGGTAC AACTGGTCAC  
CTACTCTG CCGTCTGGTA AATCAAGNCA ACTGTGACCA TCCAATGTGC CATCTTACAG GGNAAAGTTA TAACCCACTA  
TTCCCTTATA ACATA

SEQ ID NO:2396: (Length of Sequence = 223 Nucleotides)

AGGGAGATCC AGCTCCGTCC TGCCCTGCAGC AGCACAACCC TGCAACCCA CCATGGATGT CTTCAAGAAG GGCTTCTCCA  
TCGCCAAGGA GGGNGTGGTG GGTGCGGTGG AAAAGACCAA GCAGGGGGTG ACGGAAGCAG CTGAGAAGAC CAAGGAGGGG  
GTCATGTATG TGGGATTACA TTTTITTTT AAAGAAAGAA TAAATTAATT GTGATTAAAG TTG

SEQ ID NO:2397: (Length of Sequence = 379 Nucleotides)

CCATTACAAA GAATGTGGCA ACTTGCTTNT NCCTAAAGG AGGAATTGGA ACTAGAATGT GTGACTCTGT GGGGACTGCA  
TAGGTTTGT AATTGACCTA TAGCTAAACC TTAATGTGTT TGTGTGCTA TACATTGCTT TCCGCATTTT AAGACATCCA  
GAGCTATTA CCAACATTTT CTTGTGCAAT AACCTCTGCA TGTGAAACT TTAAACAGT ACTGAACAT GTAAATATGT

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GAATTTTTTT ATTAGGTGG ATGCATTTTT NGTCGTGTTA CTGCTCTTCT CAGCTTTATT CAATAAACTT GCATTTTAAAG  
GGTGTATG GCAATTTTAA CTTAAAATGT GCATCATGAT GGAAGGTGCA GACCTTTTT

SEQ ID NO:2398: (Length of Sequence = 421 Nucleotides)

GACAGGTTGG TCTTACCCAC TGENTCCCAG TCATGCTGTA AACAGGGCTT GCTTTGGAGT CTGTCAGACC TGGCTTAGAC  
CCAGGCTCTG ACCAAATGGG TGAGTTATGC AGCTACTTGG TGGCATCTAA TACCCATATCG CAAAGGACTG CCGTGAACAG  
GAAGGAGGTG TCAAATTGG CASTGCCGA TGAGGTGAGG CCAGGACCCA GGAACCTCTA TTCCCTCCCA TGCTCAGGAA  
CAGTAAGTGT TCTTCTATCT GCAGAGGTAG ATGCTTAGCA CATCGTGGT ACTTCACTCA TGATTGCTAA AATTTGAATT  
TGTTGATAAA GTCATTTCAA AAGTCAGATT CTAGGACCAA AAATACAATA TCTGTCCAAC ATGGAAGTGT TAGATCATGG  
TTTTTCCTTC CAGCCCCAGG A

SEQ ID NO:2399: (Length of Sequence = 392 Nucleotides)

GATAAGCTTG ATATCGAAAG TNCCACAATG GGTGAGCTGT ACCAGGAACA CCATGAAGAA GACTTCTTTC TCTACATTGC  
CTACAGTGAC GAAAGTGTCT ACGGTCTGTN AAGCTGCTGC CCCTGAGCTG GAGGGGGGTC TCATTCTACA AAGAGAGAGG  
TGGCCCCCTT TTCTTGACCT CCTCCTCCTT CAAGCTCAA CACCACCTCC CTTATTGAGG ACCGGCATT CTTAATGTTT  
GTGGCTTCT CTCCAGCTC TCTTAGGAGG GGTAAATGGT GAGTTGGCAT CTGTAACTC TCCTTTCTCC TTCTTCCCC  
TTTCTCTGCC CGNCTTTCCC ATCCTGCTGT AGACTTCTTG ATTGTCAGTC TGTGGTCACA TCCAGTGGAT TG

SEQ ID NO:2400: (Length of Sequence = 366 Nucleotides)

CTGGGAAGG ACTGGACAA GTTCTGCCIN AAGTGGAGC GCTGCAGCAA GACGCTGACG CCCGGGGGCC ACGCCGAGCA  
TGACGGGAAG CCGTTCTGCC ACAAGCCGTG CTACGCCACC CTGTTGGGAC CCAAAGGCGT GAACATCGGG GGCGCGGGCT  
CCTACATCTA CGAGAAGCCC CTGGNGGAGG GGCCGAGGT CACCGGCCCC ATCGAGGTCC CCGCGGCCCG AGCAGAGGAG  
CGGAAGSCGA GCNGCCCCC GAAGGCCNCA GCAGAGCCTC CAGTGTCAAC ACTTTCACCG GGGAGCCCCA CACGTGCCCC  
CGCTGCAGCA AAGAAGGTGT ACTTCGCTTG AGAAGGTGAC GTCTCT

SEQ ID NO:2401: (Length of Sequence = 385 Nucleotides)

CATCCACCCA GGGATTAGGG TTCAAGTAGC AGCTGCTAAC CCTTGCACCA GCCCTTGTGG GACTCCCAAC ACAAGACAAA  
GCTCAGGATG CTGGTGATGC TAGGAAGATG TCCCTCCCTT CACTGCCCCA CATTCTCCCA GTGGCTCTAC CAGCCTCACC  
CATCAAACCA GTGAATTTCT CAATCTTGCC TCACAGTGAC TGCAGCGCCA AGCGGNCATC CACCAAGCAT CAAGTTGGAG  
AAAAGGGAAC CCAAGCAGTA GAGAGCGATA TTGGAGTCTT TTGTTCACTC AAATCTTGGA TTTTTTTTTT TCCCTAAGAG  
ATTCTCTTTT TAGGGGAAT GGGAAACGGA CACCTCATAA AGGTTTCAA AGATCATCAA TTTTT

SEQ ID NO:2402: (Length of Sequence = 392 Nucleotides)

AAAGAACTTG GTATCTCTAT TAAAGTACAT GANCTCCAA GGAAAATAGA GCGATTACT CTCTCCAAT CAGTGCATAT  
TTACAAGAAG CACAGAGTTC AGTATGAAAT GAGAACACTT TACAGATGTT TAGAGTTAGA ACATCTAACT GGAAGCACAG  
CAGATGTCTA CTTGGAATAT ATTACCGAA ACTTACCTGA AGGGGTGCTC ATGGAAGTAA CAAAGACACA ATTAGAACAG  
TTACCAGAAC ACATCAAGGA GCCAATCTGG GAAACACTAT CAGAAGAAAA AGAAGAAAGC AAGTCATAAA GCCTTCAGGG  
AGGCCATTTT TGCCTAAATT TTGAAATGAG GGTGGGCCAG ATGAGTATGT TTAAGTGGAG AGTGCTTTCC AG

SEQ ID NO:2403: (Length of Sequence = 179 Nucleotides)



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TCATTAAGTT ATACTCTTGG ATAGGAACAC TGAGGAAAAA TGAAAGATGA GATTTGCAAT AGGGATTCTC TAATTCTCAT  
GTTAATCTGT TTTGTACCAT TTTTACTTTG TCTTTTGTGG ATCTCTTCTT TTTATTAGAT GATATTAAAG GGGATTAAAG  
TTGTATTGTA TGAAATGTC

SEQ ID NO:2404: (Length of Sequence = 399 Nucleotides)

TTCCCAAAGT GGTGTGAACA TTTTACACTC CTACTAACAG TGCATGGGAA GCCAGTTTCT CTATATCCTC TCCAACATTT  
GGTGCTGTCA ATCTTTTAAA ATTTTAGCCA TTTTGTGGT TGTATAGTGT TATCTCATG CAGTTTAAAT TTGCGATCC  
CTGAATGTGT GTAGGTGTGT ATATGTATTA TATAATATAT ATATNATNCT TTCACTTATT TTGAAGTAAT TTCAAAGTTT  
CCAGAATAAT ATCAAGAACT CCTGTACTCC CTTCGCCAGA TTCTCCAATT GTAATGTTTT ATTGCATATG CTCCATTGCC  
CATCTCCTC TCTACTTATA GCTTGCAATTA GTGTTTTCTT GGAACNNTA GAGATGAAGG TGGAAAAAAG GATGCGGGT

SEQ ID NO:2405: (Length of Sequence = 404 Nucleotides)

GGAACAGAGT GACCTGACCA CCCTAACATC AGCTGCATAC CAGCAGAGCC TGACTGTTC CACAGGAACT CATCTCCTCA  
GCATGCAGGG GAGCCCTGGA GGACACAATC GCCCAGGCAC CCTCATGGCA GCTGACAGAG CCAACAAAT GTTTGGACCC  
CAAGTGCTTA CGACCCGSCA CTACGTGGGC TCAGCAGCTG CTTTTCAGG GACACCAGAG CATGGACAAT TCCAAGGCAG  
TCCTGGTGGT GCCTATGGGA CTGCTCAGCC CCCACCTCAC TATGGGCCCA CACAGCCAGC TTATAGTCCT AGTCAGCAGC  
TCAGAGCTCC TTCCGCATTC CTTGCAGTGC AGTTACCTAT CTTAGCCAC AGCCACAGGC CTATTGCTGT GCATGGGCCA  
TTTT

SEQ ID NO:2406: (Length of Sequence = 280 Nucleotides)

AAGAGAGAAC ATTTTATTTG TCTATAATTA GGGTAAACAG TTGGGTAAAA YCTTACTAAA AGAAAGTTAA GGTGTCTTA  
ACACAAGATA TATAATGNC AATATYAGTT AATTAAATTT YAATTAAAAM CAGCTGCTTT GGAAATCCAA CATGTATACT  
TCAAAATAAT TTACCTAAAT AACTTATGAA AATGGATGTT ATTGTACAAC TCATCTCTCC TTATAAAAGG NGAACAAAGG  
ACATAGGAAA GCTGAAAAGA AGGCTAGATG AAGATACAGG

SEQ ID NO:2407: (Length of Sequence = 350 Nucleotides)

TCCAAGGGCA ATATAAATTA CAGTATGCAA AACATACTGA CTGGCTGAGG TAAAACGCAC TGCTCCTGCC TCACGTACCC  
ATGAGGGGAA ACACACATAT GCTTTTAAAA ACATCTGGCT TATAAAAAAA CATCCCTAG AAAGGCCTCC AGAGAGGGGC  
TGAGAGGCTC ACCCTCTGCC GCGCTCAGGA GGACCCGCCG GCTCAGCCCT GGCCCTCCA CTGCAGCCAT GGGTGGGCC  
TCCCCCTACT GCTGCCCAG GGCTCTGTCC AGGTTGCTCT TGATGGTGTG GAGGAAGTCC GTGGTGTCA GGAAGTGCTC  
GTTGAGCTTC ACATTGCTGA GGCGTGAAT

SEQ ID NO:2408: (Length of Sequence = 239 Nucleotides)

ATNGNTTGG GGTGCGNAGA AATGGATGTG CGGAAGAAGA AGAAGAAAAA AAATCAGCAG CTGAAAGANC CAGAGGCAGC  
AGGGCCTGTG GGGACAGAGC CCACAGTGA GACACTGGAG CCTCTNGNAG TCCTGTNCCC GTCCACCACC AAGAAGAGGA  
AGAAGCCCCA AGGGAAAGAA ACCTTCGAGC CAGAAGACAA GACAGTGAAG CAGGAACAGA TTAACACTGA GCCTCTAGA

SEQ ID NO:2409: (Length of Sequence = 331 Nucleotides)

TCCTTCAAG AATTTAGAC CAATCGACG TCCTGTCTCT TTAAGGCTTA GGAAGAGCAG TGTGGCTGCC CCTTTAAGGA  
GGCGTTGCAA CAAACCATAT TGGACAGACG ATGGGGGCGA CCCATCGGGA CCCGACGGGC CTCTGACTCC AGCAATACAG  
CGAATCAGCG GCTTTCGGGA ATACATTTTT CGGAAAAGA CTTCTTCTC GGTTTTCTGC TCTGCACAG TTGAATTTT

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CCCCAGTTTT TCCTGCAGAT CGGGAGTCGA GCAATGCCTA CCCCCGCCTC CCGCACCAGT TGGGCGCTCC CGGATGATGC  
CCTACCCCTT T

SEQ ID NO:2410: (Length of Sequence = 135 Nucleotides)

CTGCAGGACT TGCGAAGAGC GTGCATTCCC AGTGGGCGAA CGGGAATTTC AACGGAGAGA GGGTATCTT GTGGGGGGCT  
ACCCGTGGAG AGCAAGGGGC CCCCAGGGT TGGTGGTG AAATTNAGGT CGCCC

SEQ ID NO:2411: (Length of Sequence = 330 Nucleotides)

ATGCTGCTCG GTTCTCTGT CCCCCAACT TTACCGGAA GCCCCAGCCT CAGAGTCCCC TCGTTTCTCC TTGGAGGCGC  
TGACGGGTCC AGATACGGAG CTGTGGCTTA TTCAGGCCCC TGCAGACTTT GCCCCAGAAT GCTTCAATGG GCGGCATGTC  
CCTCTINTCTG GCTCCAGAT CGTCAAGGGC AAATTGGCAG GCAAGCGCA CCGCTATCG AGTCTCAGC AGCTGTCCCC  
AAGCTGGAGA AGCGACCCCT CTGGCCCCCT CAANGGAGGC AGGAGGTGGA CTCACCTGTG CCTCAGCCCC CCAGGGCACC  
CTAAGGATCC

SEQ ID NO:2412: (Length of Sequence = 583 Nucleotides)

TGCACCGGTG CACCAGGTGC CGTGTGGAT TGTNACAGNN ACGTGGGTNA TGAAGGTAAC CACCTACCGN GTGCACGTGG  
CCNAGCAGCA GGACGTGCAC CTGACTGTNA CGGAGTCTCG GCAGCATGAG CTCTCGCCAG ACTCGAACTT GCCCGTGCAG  
CTCTCACCA TCCGTGTGGC CAGCACCAAC CCTGCTGTGC AGGCCCTTGA CATCTGGCTG AACTCCACTG AGTACGGGG  
GCTCTGCGAG AAGCTCCGG CACCCATCCG CAGGGCAGCC CATGTGGTCA TCCACCAGAG CCTGGGCGAC CTNTTNTTGG  
AGACATTTGC CTCCTGGTA GAGGTCAACC CGGCCTACTC AGTGGCCAGC AGCCAGGAGC TGGAGGCTG CATAGGCTTG  
CATGCAGACA CGTGCCAACG TGAAGNTGGT GAAGACCTGC CAGGAGTCAG CCACAGGGGA GTTCCAGCAG TMTAATTC  
CGCCCCATGT TGGTGGCTTA ACTTGATNGG GAAAGTGENT TNGNCAAGCG GCAAGACCCC CTGGGNCCTT NAACTTGNT  
TGGCAAACGG GGTNCCTGCA TGG

SEQ ID NO:2413: (Length of Sequence = 203 Nucleotides)

TGCTCTCCC ACCCCCTAGC CATGCAGNGG TGAATNGGG AACCCAGNN GGGGGCTGAG AAGCTCCAGG CCACCTTNAG  
GGAATCCAG AGGGTCTTTC TACCAGGAAG AAGTGCGCA GCTGCGTGGC CGCCGAGACC ACGCGGGAGG TGATCTGGTG  
GGACAAACGT TCCGTCTGCT CCGAGTCAG GAGATCGAGT CTC

SEQ ID NO:2414: (Length of Sequence = 92 Nucleotides)

AAGGGGCAGG ATGGGGCTGG GAAGTCCAAC CCCACGATT TGGGCTCAGC CTTGGACATG GAGGCTGAC AGCTGTGTG  
CTTTGGGGAT CC

SEQ ID NO:2415: (Length of Sequence = 401 Nucleotides)

CTTTTCCCTT CTGTGGNCCA AATGCANCA CTNATACAC GTTGCTTAAC CTAGAANCCT GGCTCCACCG TGAATTCTAA  
TTGGTCCGTG CTATCGAGGC ACTGTCCCT TAACTGGTCT CGCTCCAGTG GCCCCNACTG CTTTCTTCC TCTTCCAGNA  
ATGGCTCTTC GGGCCAGAG TTGAATCTC GCGATCGGA TGGGGACGGA GTACCGGCT GGGGTGTCCC AGAGCCCGGA  
CTGAGCTGGG GAGTCAAGAC CTCGGGCGAT GAGGGCTGAG CAAGTCGGAG TCGTAGGTCC AGTCTTCCC CAGCTTCTCC  
TGCTCCAAT CTGTGGGT CTGGGGTCT TCGTCTTCC AGCGGGGTG AGCTGCTGT GGAAGAGTCC TCCCGGATC  
C

SEQ ID NO:2416: (Length of Sequence = 245 Nucleotides)

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ATGTAATACA GTGTAGAAAG CGATCATGTC ATAAGCAATG ATTCTGTACA ATCAINONGC AGAAAATTAG TTTTGGAGAA  
 TTCCTGGTAA TTGAAGACCA GCAGAGCACC CCTCCCCACC CGCCCCCTAA AAGTGCTTAC AATTTACAGG GATYCTTTTC  
 TTTTTCAAAG ACCCAAAGAY ACGTGGTCAG AAAAMAAAAG CTTGAAGTCT CAATGCCCTAA TGTCGTGCAC ATTKNACAGG  
 GACGC

SEQ ID NO:2417: (Length of Sequence = 384 Nucleotides)

GGTTTTCGCA GATGATGGAA CATCCCATAA GCCCAGGTGT GCAGCTAACC TTTAGAAGCT GGAAAAGSCA AGGAAACATA  
 TTCGTAGAG CCTCCAGAAG GAACACACGT CTGCACACAC TTTGTTTTTA GCTCAGTGAA ACTGATTTTG GACTACTGAC  
 CTTCAGAACT GTAAGATAAA TTCTGTGTGT TTTACGTTTG TGGTGTATATA GAAGTTACAG AAATGAATAT ACTTACCGTA  
 GTTTAGAGAG AGATGGGAGG ATACTTTTTT TTCTCCCTTC TTTTGAAGG GAGGTAGGTC TCCTTAACCTC CAGAGGAAAG  
 ACTGTCTTT CTTCATATAG GGGCCCTTGG ATTCTTAATT CATGGGAGTT GTTTAGGAGA TTGA

SEQ ID NO:2418: (Length of Sequence = 1645 Nucleotides)

GTGATGGCTG CCTGAGGGG GACCATCATG TCGGAGACCG CATTGGTGCA GGTCACACC CACAGCCCAT GCCAGCCTC  
 CTGCAGACTC AGGTCATCCA GCTGGTCGAT GGCTCTTTGC ATACCTGGTG CCTCTCTCTC TCGGGCTTGG CAGGCTTCTC  
 TGGGGGCTTC TCAGATGACT CTTTGGCCTT CTCTCTGTTC TTGGCTAACT CCTGGGCCAG CTCTGAACGT GCCTCCTTGG  
 CTCCCTCTTC TACCACCTCC TCCCGTTTGG CCAACTTGCT CACGGCCGTC TTGGTAGTGG CTTTGAGGCT CTCTTGCTA  
 TCAGCCCGCT GTTTGATTTT GCTGGGCTTG AGGTTGGTAG GCACAGCCCC AGAAGCCAGG NCCTTCTGCG TGGCCACAGG  
 GTAACGCAGG AAGTCCAGAT GCGAAGCTT TTCTAGGCCC TCCAAGATCT TGTTTGGGG AGCATTTCCT GGAAAAGCA  
 CACGCACAAT CTCTCAGTG GGATTGGCTG GTAGCCAGAC CACCAGAGCA GTGATAGAGG TAAGGTAGGG CACGAGATC  
 TCAGCCTCCT TCCCATGGG CAGCACGATG CCTGINTTGG CTTTACTATT GCCTGCCAC TTTTGCATGA GGAAGTGCAT  
 CTCTTGCTG TOCTTGACAG GGTGAGGAC ATACATGTCC AGCGGCCCA CACCCATTTT GTGAAGAGG GTCAGTGGCT  
 CAATGGTATT GCTGACCACA CGATATAGAG GCTCAGCCTG GATGCCCAGG CGGTTAAGT GCTGCAGAGT GAGGCAGGCC  
 TCTCAATGC TACGCTTGGC TTTCCGGGAG GCATCAGGAA GCGCAGCTT CTCAGGCAG TTGAAAAGA CAACTCCAAG  
 CTCAGGANAG ATAAGGTTCT TCACCCAGTC GCTGTAACTG CTAGAGCCCT GGNACTGCTC CTCTCTAGC TCTGCCACTT  
 TGCGCTGCAG TAGTCCATTG ATGCCTGGCA GGTGTCTGTC CCAATGTGT GTNAGTAGCA CCGAGTCAAT GCGGTCCAAG  
 TNCCGTACCA GCTTCCAAA ACAGGACTTG CGATCAGAGC CACCATCCAC CAGGATGTTG AAACCATTTGA CAGCAAAGAG  
 GGCAGAGTCC CCAAGACCAC CTGGGAAGAT GTAGCAACAA GGCTTGAGGA GCTTGAGGAA GCCCCCTGAG GTGGGGGGCT  
 CTAGTAGGTC AAATGGGGAT GGCACGTCCA CAGTCTCAGA GACATACTCG GAGAACTCAG CCAAGCCGTC CATGGTGGGC  
 AGAGTGGGCT CAGGGTTTAG CCGGAGGTGC AGGGTCTCTT GGGAACTGGA TAATCCAGG TGCTCCAAT CACCTTCCCC  
 TAAGCAGGAC ACGGTAAGGA AGGCCTGTAT CCCAGGTCT CTATGCTGA GCAATTGGGA AATCTCGGGG TTGTGAAGGA  
 CCTGGGCAA GTTTTCATAT GAGTAGGTGC CACTCTGTAG GATGAGGTCT CCCCAGGCT CTAAACTTTG CCCACTCAAG  
 ATTAGTAGTT TATAAGCTGA TGAGCTGCTA AGAAGATGAT GAACCTCAGA GCTGATGCTG TCTGCACTGG GATTTACCAG  
 GATGATGGTC TCTAGGATCT CACTCTGGTG GCAAAGGGTC CTCTG

SEQ ID NO:2419: (Length of Sequence = 837 Nucleotides)

GGAAGGATGA GAAACAGATT TNGCTCACT TCATGGGCTG GCCTGGAATT GACGATGGTG CAAACCCAAA TNATCCTGAT  
 GTAATTATG AAGATTATGG AACTGCAGCG AATGACATCG GGGACACCAC GAACAGAAGT AATGAAATCC CTTCACAGA  
 CGTCACTGAT AAAACCGGTC GGGAACTCT CTGGTCTAT GCTGTGGTGG TGATTGCNTC TGTTGGTGGGA TTTTCCCTTT  
 TGGTAATGCT GTTTCINCTT AAGTTGGCAA GACACTCCAA GTTTGGCATG AAAGGTTTTG TTTGTTTTCA TAAGATCCCA  
 CTGGATGGGT AGCTGAAATA AAGGAAAAGA CAGAGAAAGG GGCTGTGGTG CTGTGTGGTT GATGCTGCCA TGTAAAGCTGG  
 ACTCCTGGGA CTGCTGTGG CTTATCCCGG GAAGTGCTGC TTATCTGGGG TTNCTGGTA GATGTGGGCG GTGTTTGGAG

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GCTGTACTAT ATGAAGCCTG CATATACTGT GAGCTGTGAT TGGGGAACAC CAATGCAGAG GTAACCTCA GGCAGCTAAG  
CAGCACCTCA AGAAAACATG TTAAATTAAT GCTTCNTTC TTACAGTAST TCAAATACAA AACTGAAATG AAATCCATT  
GGATTGTACT TCININCTGA AAAGTGTGCT TTTTGACCCCT ACTGGACATT TATTGACTTA ATTGCTTCTG TTTATTAATAA  
TTGACCTGCA AAGTTAAAA AAAATTAAAG TTGAGAACAG GTATAAGTGC AACTGAATA GTCTAATCTA CATGTAACAC  
ATATTINNGT ATGATTTTCT ATACTCTAAT CAGCACT

SEQ ID NO:2420: (Length of Sequence = 1843 Nucleotides)

GAAGCTCCCG CCCAGGTGGC CGCTGGCTGC TGAGCTCACG CCAAGGTGCG GCTGTGGTGG TGGTGGTGGC GGCTGCAGGC  
TTTGCTGCTG CTGGATGTTT GCTGGCTGCA GGTTCCTGCTG CTGCATCTGT AAGTTTGTG GCTGCACCTG CTGGGTCTGC  
ACCAGGTGAG GCTGGGTGGC CAGCCGGGTG CTGGGCAGGC CCTGTGAGCT CATCATCTGG GACAGGGCGC TGGCAGCAAG  
GCTACTGTGC AGCGGGCCTA CCATGCCATG CTGCAGGAG GGGGCTGTG TGCTCAGGGG GCTGGTGCC AACTCCCCC  
GCAGAGGGTT GTATTGGTTC GGCACCATGC CGCTCTGCAG CCGGGACAGC CACTCGCAIT GACCATTCAA ACTGGTGGAC  
CCGNCACAG TGAAATTGAG GGGCCCTCCG CTGCTNGAGC CCAGGACGGT GCTGGTGCCA GAGGCCACAG GCAGGTGGGA  
GAGACGAGGT GGGCCAGTNT TAAAGGCCAG CCGGCCGCC CCACCCANCG CCGCCATYTC GGGCTTGGCC GCCAGTTCA  
GGTNCCTNAT GCCCAGGTGG GTGTGGGCA TYCCAGGAG GTGGTTGAGG GGCACGGACG GAGACTGCTG GAACGGGGAG  
GGCAGNAGTG GCGGCGAGGC CAGCTCTGAC AGGTAGCCAT GGGGTGACTC CAGGGAGTCC ACGGGGAGAG GCATGCCGGA  
GCTGTCCAGC AGGCAGNCT TGCGTCTG GGAFTCTTC CTCCTGCTT TGAGGTCTT GGCCTCCTTG CTTCACAGG  
CCAGGCCTTT GCTGCTGGGC TTGCGGACCT TCTTGCCCTG CACGCCGGGC TTGAGGCTGC CCAGGTAGCC GTTGGGCGAG  
CAGAGCGNGG GCGACAGGGT GGGCGTCCC CCCAGCGGC TCCGTGCAGC TGCGGGCTGC GCACAGGTT GACTCGTCC  
AGCAGCCTCA CGATGTCTG ATGATGNC TCCNTNGCA TGTCGCGCG CAGGCGTCC ATATGATCCG TGATGTCCCG  
GTGGCAAAG TGSTCCAGCA GCACCTTGGC GGTCTCTAG CTGCCCTCCC GGGCGGCCAG AACAGGGGT GTCTCTCCC  
TGTTGTCTG CATATCTTTG TTAGCCCCGT TCTTCAGGAG CACAACCTCG GCATCCACAT TGTTCACNGC GCGGGCCAG  
TGCGGGCGG ACTTGCCAG GTNATCTAGC GCGTTGACGT CCGGTGTGA GTTGATGAG TCTCCAGCA TGCCCTCCAC  
GGCCAGGCGG GCAGCCAGGN TCAGTGGCGT CGTGCCATCA TGATGCGGG CATCCAGGTG TGTGGCTCG TTCCGGATCA  
GGATCTTGA AGACACCTTG TGCGTCGCA GACACAGCCG CATGCAGCG GGTGCGGCC ATGTGTCTT GGATGTGGC  
ATCTGCGCTG GCTCCAGCA GCGCTTGGC GGCATCAGAG CGTGAGTAGC GGGCGGCCAG GTGCAAGGCG GTCTCGCCG  
TNCGGTCTGT CTGGTTGTG AAGCTGGCGC CCTGGTAGAT GAAGTCGGAG ATGACGGCG GCGGTCTCT CTCTCTCTG  
CTGTGCCCC TCTCCAGGC GCGCCGCTG CAGGAGGCGA TCATGAGCG GGTGAAGCCA TCAGGCCCCG GGACATTGAC  
GTCCATGAG TCGGCGTCAA CCTCACCTG GGGCGGTGTG GGGGCCATG CANACATGCG CAGGTGAGC GCATCCAGGT  
GCTGCTGAGT CCACTGCCG TGGTCTGTCT GGTCTGCCAG GTCAGGCAGA ACCACGGGCT CCTCGAACG GAACTTCTTG  
GTC

SEQ ID NO:2421: (Length of Sequence = 1452 Nucleotides)

CCAGCAACTC AAATTCACCA CCTCGGACTC CTGCGACCGC ATCAAAGACG AATTTCAGCT ACTGCAAGNT CAGTACCACA  
GCTCAAGCT CGANTGTGAC AAGTTGGCCA GTGAGAAGTC AGAGATGCAG CGTCACTATG TGATGTACTA CGAGATGTCC  
TACGGCTTGA ACATCGAGAT GCACAAACAG GCTGAGATCG TCAAAGGCT GAACGGGATT TGTGCCAGG TCTGCCCTA  
CCTNTCCAA GAGCACAGC AGCAGGTCTT GGGAGCCATT GAGAGGGCCA AGCAGGTAC CGCTCCGAG CTGAACCTA  
TCATCCGACA GCAGCTCAA GCGCACAGC TGTCCAGCT GCAGGCCCTG GCGCTGCCCT TGACCCACT ACCCGTGGG  
CTGCAGCCG CTTCGCTGCC GCGGTGAGC GCAGGCACCG GNTCTCTCT GCTGTCCCG CTGGGTTCC CAGGCCACC  
TCTCAAGGA AGACAAGAAC GGGCACAGT GTGACACCA CCAGGAGGAT GATGGCGAGA AGTGGGATTA GCAGGGGGC  
GGGACGGGA GGTGGGAGG GGGACAGAG GGGAGACAGA GGCACGGAGA GAAAGGAATG TTTAGCACAA GACACAGCGG  
ANTCTGGGAT TGGCTAAACT CCCATAGTAT TTATNGTGGC CGCGGCGGG GCGCCAGCC CAGCTTGAG GCCACCTCA

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GCTTTCTTCC TACCCCATTC CCGGCTTCCC TCCTCTCCC CTGCAGCCTG GTTAGGTGGA TACCTGCCCT GACGTGTGAG  
GCAAGNTAAG GCCTGGAGGG TCAGATGGGG AGACCAGGTC CCAAGGGAGC AAGACCTCGC GANGCARGCA AGCCCCNGCC  
CTTCCCCCGT TTTGAACATG TGTAAACGAC AGTCTGCCTG GGCCACAGCC CTCACACCTT GGTACTGTCAT GGACGNAATG  
CTAGCTGCCC CTTTCCCGTN CTGGGCACCC CGAGINTCCC CCGACCCCGG GTCCCAGGTA TGCTCCCACC TCCACCTGCC  
CCACTCACCA CCTCTGNTAG TNCAGACAC CTNCAGGYCC ACCTGGTCCT CTNCCATCGC CCACAAAAGG GGGGGCAGCA  
GGGACGAGCT TAGCTGAGCT GGGAGGAGCA GGGTGAGGGT GGGGACCCA GGATTCCCCC TCCCCTTCCC AAATAAGAT  
GAGGGTACTA AAGTTGTCCTT GGTTTTATT TTATTATTAT TTTTTCTTT TTCCAGTATA CTAGCTTGTC TTTTAAGAAA  
GGGGATATTA AAAAAAAAAA AAAGACAAAA GTGTTTTTAA AAAAAAGCAA CACCCACACC TGGTGTCTGT ATATAGTCAG  
CTTATCTCGT GTTCAATCGT CTGATCTCTA CAGAGAGAAG TGGAAAATGC TGTATCAAGG GTGGGCTTAG CTGTGCCTTT  
CCAATAAAGA TG

5     WHAT IS CLAIMED IS:

1. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS 650, 1834, and 2073;

10           or having a sequence complementary thereto.

2. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

15           or complementary sequence thereto or, for those sequences over 150 nucleotides long, a portion thereof at least 150 nucleotides in length.

3. An isolated polynucleotide that includes a sequence designated as one of:

20           SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

          or complementary sequence thereto or, for those sequences over 150 nucleotides long, a portion thereof at least 150 nucleotides in length.

25     4. An isolated polynucleotide operably coding for a native human polypeptide or protein, which includes a region coding for the same amino acid sequence as a native human coding region corresponding to a sequence designated as one of:

SEQ ID NO: 316 - 2421.

30     5. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 6 and is one of SEQ ID NOS: 316-2421.

6. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 7 and is one of SEQ ID NOS: 316-2421.

35     7. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a metabolic functional grouping and is one of SEQ ID NOS: 316-2421.

8. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a structural functional grouping and is one of SEQ ID NOS: 316-2421.

5 9. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 11 in a developmental control grouping and is one of SEQ ID NOS: 316-2421.

10. An isolated polynucleotide coding for a human protein or polypeptide, which includes a coding region corresponding to the EST identified as:

10 SEQ ID NO: 316 - 2421;

or a polynucleotide complementary thereto.

11. The polynucleotide of Claim 10, wherein the SEQ ID NO is 316-1000.

15 12. The polynucleotide of Claim 10, wherein the SEQ ID NO is 1001-1500.

13. The polynucleotide of Claim 10, wherein the SEQ ID NO is 1501-2000.

14. The polynucleotide of Claim 10, wherein the SEQ ID NO is 2001-2421.

20 15. The polynucleotide of Claim 10, wherein said polynucleotide further includes the entire sequence designated as any one of SEQ ID NOS: 316-2421.

25 16. An isolated polynucleotide comprising at least 150 bp of a sequence of Claim 10 and wherein said SEQ ID NO excludes NOS 485, 650, 1834, 2073, 2092, and 2353.

30 17. An isolated polynucleotide sequence, which hybridizes to a sequence designated as any one of SEQ ID NOS 316-2421, except SEQ ID NOS 485, 650, 1834, 2073, 2092, and 2353, or to a sequence complementary thereto, under hybridization conditions sufficiently stringent to require at least 97% base pairing.

18. A polynucleotide according to any one of Claims 4-17, in substantially purified form.

19. A construct in isolated form comprising a vector and a polynucleotide according to any one of Claims 1-17.

35 20. The construct according to Claim 19, further comprising a promoter operably linked to said polynucleotide.

21. A panel of at least 100 isolated polynucleotides having the sequences of Claim 3 or Claim 16.

22. An antisense oligonucleotide capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10.

23. A triple helix probe capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10 having at least a 10-base homopurine or homopyrimidine sequence, said probe comprising single-stranded DNA having at least a 10-base homopurine or homopyrimidine sequence and being adapted to bind to the major groove of double stranded DNA which includes said polynucleotide-encoding sequence.

25. The polynucleotide of Claim 1, wherein said SEQ ID NO is 913.

26. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1039.

27. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1395.

28. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1567.

29. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1667.

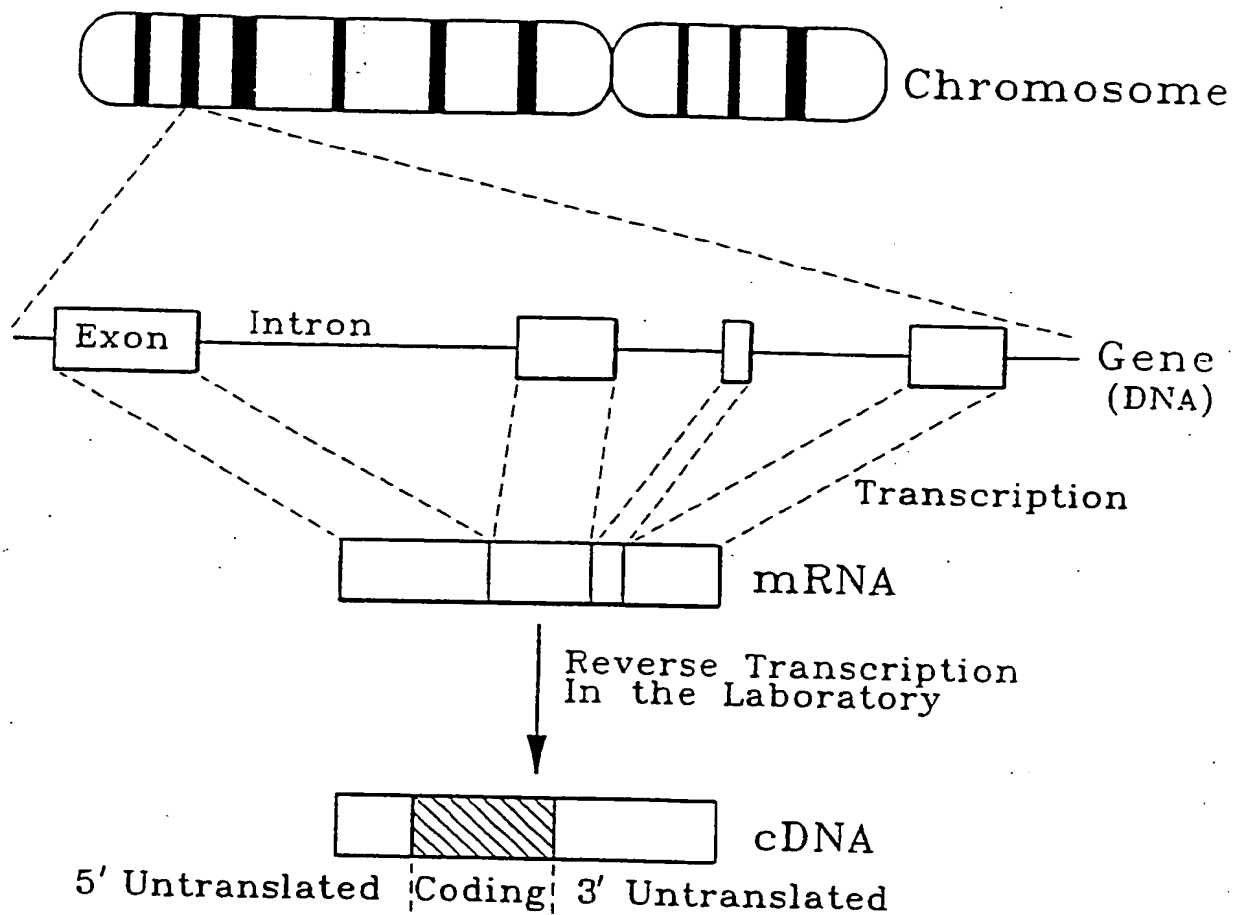
30. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1704.

31. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2089.

32. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2297.

33. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2302.





*FIG. 1*

# SUBSTITUTE SHEET





## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>5</sup> :</b> <b>C12N 15/11, C12Q 1/68</b>	<b>A3</b>	<b>(11) International Publication Number:</b> <b>WO 93/16178</b> <b>(43) International Publication Date:</b> 19 August 1993 (19.08.93)
<b>(21) International Application Number:</b> PCT/US93/01294 <b>(22) International Filing Date:</b> 12 February 1993 (12.02.93)  <b>(30) Priority data:</b> 07/837,195 12 February 1992 (12.02.92) US  <b>(71) Applicant:</b> THE UNITED STATES OF AMERICA, as represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES [US/US]; Washington, DC (US).  <b>(72) Inventors:</b> VENTER, Craig, J. ; 1718 Nordic Hill Circle, Silver Spring, MD 20906 (US). ADAMS, Mark, D. ; 12812 Sage Terrace, Germantown, MD 20874 (US). MORENO, Ruben, F. ; 14415 Coral Gables Way, North Potomac, MD 20878 (US).		<b>(74) Agents:</b> ALTMAN, Daniel, E. et al.; Knobbe, Martens, Olson and Bear, 620 Newport Center Drive, 16th Floor, Newport Beach, CA 92660 (US).  <b>(81) Designated States:</b> AU, CA, JP, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>  <b>(88) Date of publication of the international search report:</b> 25 November 1993 (25.11.93)
<b>(54) Title:</b> SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION PRODUCT  <b>(57) Abstract</b>  Partial and complete human cDNA and genomic sequences corresponding to particular expressed sequence tags (ESTs). The ESTs are cDNA sequences that are generally between 150 and 500 base pairs in length, are derived from human brain cDNA libraries, correspond to genes transcribed in human brain, and have base sequences identified herein as SEQ ID NOS: 1-2421.		

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 93/01294

<b>I. CLASSIFICATION OF SUBJECT MATTER</b> (If several classification symbols apply, indicate all) <sup>6</sup>		
According to International Patent Classification (IPC) or to both National Classification and IPC Int.C1.5                      C 12 N 15/11                      C 12 Q 1/68		
<b>II. FIELDS SEARCHED</b>		
Minimum Documentation Searched <sup>7</sup>		
Classification System	Classification Symbols	
Int.C1.5	C 07 K                      C 12 N                      C 12 Q	
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched <sup>8</sup>		
<b>III. DOCUMENTS CONSIDERED TO BE RELEVANT<sup>9</sup></b>		
Category <sup>10</sup>	Citation of Document, <sup>11</sup> with indication, where appropriate, of the relevant passages <sup>12</sup>	Relevant to Claim No. <sup>13</sup>
X	SCIENCE vol. 252, 21 June 1991, WASHINGTON, DC, USA pages 1651 - 1656 M.D. ADAMS ET AL. 'Complementary DNA Sequencing: Expressed Sequence Tags and Human genome Projects' see the whole document ---	1-11,15 -23
P,X	NATURE vol. 355, 13 February 1992, LONDON, UNITED KINGDOM pages 632 - 634 M.D. ADAMS 'Sequence Identification of 2375 human brain genes' -----	1-11,15 -23
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><sup>10</sup> Special categories of cited documents : <sup>10</sup></p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reasons (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 45%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"A" document member of the same patent family</p> </div> </div>		
<b>IV. CERTIFICATION</b>		
Date of the Actual Completion of the International Search  <div style="text-align: center;">07-07-1993</div>	Date of Mailing of this International Search Report  <div style="text-align: center;">22. 10. 93</div>	
International Searching Authority  <div style="text-align: center;">EUROPEAN PATENT OFFICE</div>	Signature of Authorized Officer  <div style="text-align: center;">VAN PUTTEN A.J.</div>	

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 93/01294

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos. because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos. because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos. because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see PCT/ISA/206 mailed on 12.08.93

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-11, 15-23(part.)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.